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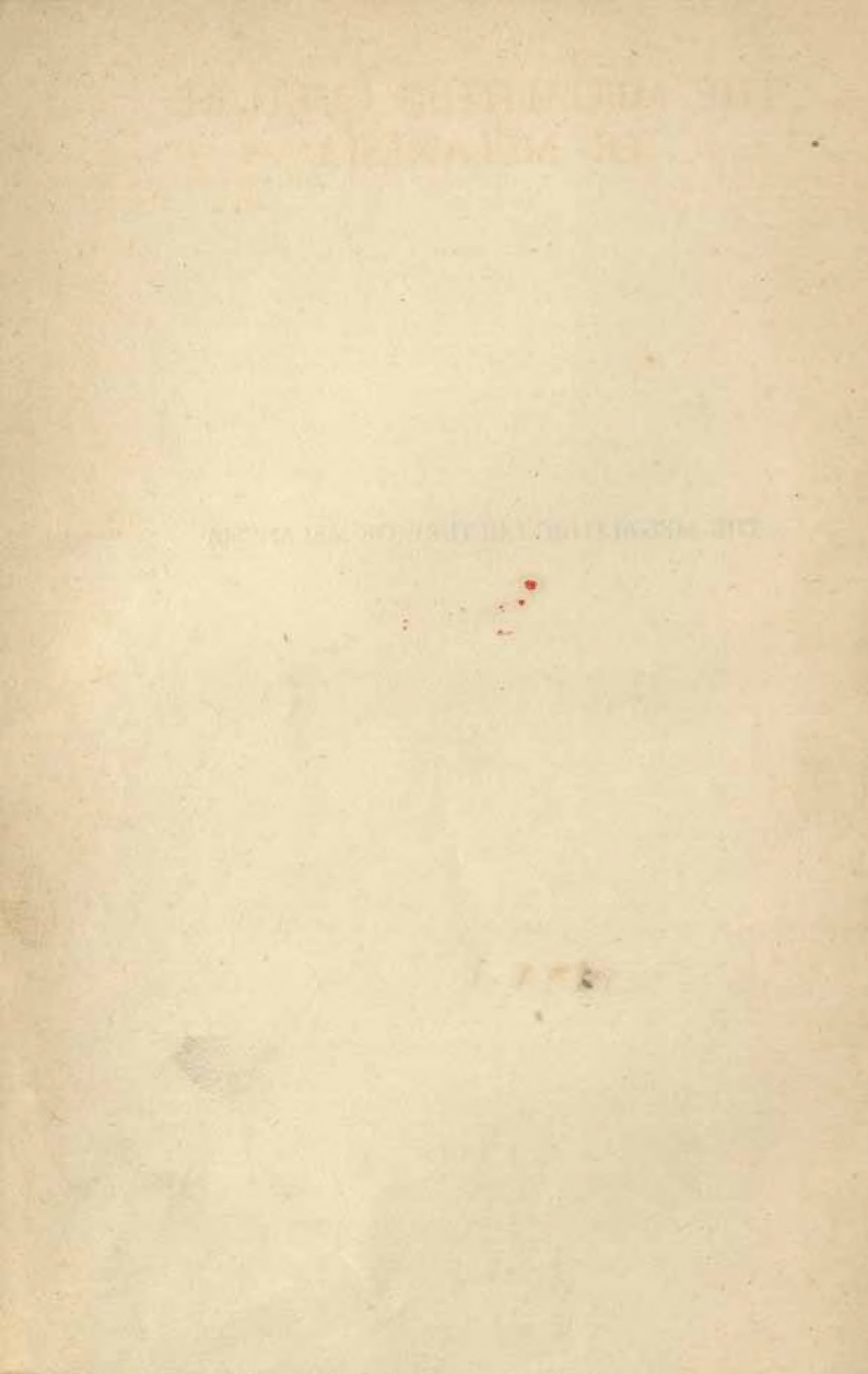
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THE MEGALITHIC CULTURE OF MELANESIA



THE MEGALITHIC CULTURE OF MELANESIA

BY

ALPHONSE RIESENFELD, PH.D.

With 3 plates, 26 figures and 8 maps



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TO MY FATHER

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SYMBOLS

	Plain monoliths		Figona cult
	Carved monoliths		Shark cult
	Phallus-shaped stones		Stone-built fish ponds
	Dolmens, Stone tables		Carved stones
	Stone seats		Prehistoric obsidian objects
	Stone circles		Prehistoric pots or potsherds
	Stone heaps (altars)		Coiling method
	Meeting place paved with stones or flat platforms		Stone rings
	House mounds		Earthenware rings
	Village terraces		Stone mortars
	Stone graves		Stone pestles
	Stone cairns for skulls		Quadrangular axes
	Stone walls		Prehistoric quadrangular axes
	Stone figures		Stone heads
	Prehistoric stone figures		„Einstieggabeln”
	Terraced irrigation		Avenues
	Nanga enclosures in Fiji		Artificial Islands
	Park-like dancing grounds		Artificial wells
	Modelling of skulls		Ditches for draining
	Tumuli		Ditches for defence
	Stone enclosures		Ditches for other purposes
	Petrographs		Sacred Plants
	Ceremonial bonito fishing		Myths of the stone-using im- migrants

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I. INTRODUCTION

Very few of the many problems of modern anthropology have aroused so much interest as the study of megaliths. One of the reasons which has led to a thorough investigation of this problem is that megaliths are found in abundance also in Europe and provide one of the subjects of European prehistory. It is therefore surprising that so little should have been done by anthropologists to solve the question of megaliths in Melanesia. Some local descriptions do of course exist, but a comprehensive treatise on the megaliths of the whole of Melanesia has not been attempted so far. Existing works on megalithic "culture" therefore lack basis, that is, a thorough knowledge of the geographical distribution of megalithic stone-work. This observation applies to RIVERS' standard work *The History of Melanesian Society* and, to an even greater extent, to his *Sun Cult and Megaliths in Oceania*. Another attempt to reconstruct the megalithic "culture" has been made by DEACON¹⁾ who in many respects follows RIVERS. Though many of DEACON's opinions are valuable, they owe their origin chiefly to the material in regard to Malekula, and should not be applied to the whole of Melanesia until the megaliths of the whole of this region are treated in a comparative study. VROKLAGE's *Die Megalith Kultur in Neu Guinea* is another attempt to reconstruct the megalithic "culture", but has the disadvantage of being confined to New Guinea which, it will be seen, is far too restricted a region for the problem of the megalithic culture; the author is not sufficiently acquainted with the distribution of megalithic stone work in New Guinea, and in his work, an attempt has been made to apply to Melanesia the results obtained originally in Indonesia, results which, it may be said, have not passed unchallenged even for Indonesia. One of the reasons which render the study of the megalithic problem in Melanesia so difficult is that the sources of information are scant and often extremely vague, notwithstanding the very excellent field-work of such authorities as DEACON, FOX, IVENS and LAYARD. Our knowledge of megaliths in a number of regions presents many a lacuna, owing principally to the fact that the majority of observers and travellers were not experienced anthropologists, and were unaware of the very problem of megaliths. This ignorance is manifest in one of PARKINSON's works, notwithstanding that PARKINSON is one of the best among the older students of Melanesia, and that we owe a great deal to him for much important information. In his monumental work *Dreissig Jahre in der Südsee* there is a photograph of

1) DEACON 184 705 ff.

a wonderful stone-table from the French Islands (Pl. 14, p. 208). On this stone-table a young native is sitting, and PARKINSON entitles the picture, significantly: "Young Man from Uuea (French Islands)". In the relevant text there is no mention of this stone-table or of any other megalithic stone-work, from which it is evident that PARKINSON was unaware of the significance of this megalithic stone-table. FINSCH, to whom also we owe a great deal of valuable information on the material culture of Melanesia, says in his *Samoafahrten*: "Bigger stone-work seems to be lacking in Melanesia" ¹⁾. Another reason why monuments of the megalithic culture have been overlooked, may be the fact that some of these monuments were made of wood, a fact to which HEINE-GELDERN and KOPPERS have drawn attention in regard to Indonesia and India ²⁾ and which is true also of Melanesia. "This point is not without significance for students of prehistory" says KOPPERS, "in cases where gaps in distribution may perhaps be explained by the use (and decay) of less durable material".

Finally it should not be overlooked that the functional method, which cannot be ignored by any modern field-worker, has very often neglected the study of the material culture. For instance, it is regrettable, that MALINOWSKI, in spite of his unequalled knowledge of the Trobriand Islands, was totally ignorant of the very important megalithic structures found in these islands and regarding which LEO AUSTEN has later given us information.

The material can be treated in three different manners: first, the facts might be given in geographical succession from west to east.

From a historical point of view, this arrangement would appear to be the most appropriate as it corresponds best to the direction of migrations in Melanesia. Since, however, it is principally the western regions of Melanesia, including New Guinea, which are poor in megaliths, we have not thought it expedient to follow this arrangement.

The second possible method of presentation is that which PERRY has chosen, namely, that of singling out the various types of stone-work and presenting them in geographical succession. To decide whether certain doubtful stone-work is megalithic or not, PERRY studies its geographical distribution and its function. If the distribution of these doubtful elements corresponds in any way to the distribution of the typical megalithic stone-work, and if the function of both is the same, he concludes that they are real megaliths. This method of presentation has the great disadvantage of insufficiently revealing the degree to which a certain culture was influenced by the stone-using immigrants. Therefore we have rejected this method also.

We have followed the principle of presenting first the facts relating to that region about which we possess the fullest information concerning megaliths. From this region we pass successively to those concerning which our knowledge is less complete ³⁾. Although the arrangement of data in this

1) FINSCH 236 233. 2) HEINE-GELDERN 350 282 f, KOPPERS 437 202. 3) It is this principle which we have followed in our work 719.

manner is contrary to the chronological succession of events, it has the advantage of preparing our minds for an understanding of those areas in which only faint traces of megalithic culture are found. It is unnecessary to stress here that not all veneration of rocks and the use of stones in magic is necessarily connected with megaliths, as has already been shown in our previous work *Fruchtbarkeitsriten*. On the other hand, an account of megalithic stone-work only would be incomplete, since wooden monuments also form part of the megalithic culture. Furthermore, the stone-using immigrants were a migratory people *par excellence*, and it is therefore only natural that the regions through which they rapidly passed contain little or no stone-work, though relics of articles of daily use and of a mythological nature have nevertheless been found in those regions.

A necessarily fragmentary picture would be all that we should get from the study of one of these elements only, but by endeavouring to reconstruct the entire fabric, or even to elucidate some of the elements of it, the subject of this work will not be a history of megalithic stone-work only, but rather the history of megalithic "culture".

I have hesitated considerably before deciding to call the present work "The Megalithic Culture of Melanesia", not so much because I wished to avoid using the identical name of PERRY's work, but also because the present study can reconstruct but a part of that great complex, the megalithic culture. It is in no sense my intention to criticise all the assertions of PERRY, RIVERS, E. SMITH, etc. The present work sets out to show first the geographical distribution of megalithic stone-work, and then to elucidate, to some extent, the elements constituting megalithic culture. To do this we must also study the prehistoric objects found in Melanesia, and then ask who were these stone-using immigrants who introduced megalithic stone-work into Melanesia; what were their racial characteristics, the directions of their migrations and the periods of such migrations. From the study of the relevant works on the subject of physical anthropology, it is not yet possible to make any satisfactory comparative investigation of the racial characteristics of the whole of Melanesia. We have therefore been obliged to confine our description of the stone-using immigrants to the colour of the skin and character of the hair, giving only a passing glance at other racial characteristics.

For the reconstruction of historical events we have no other means at our disposal so direct as the study of myths, a most important type of information which cannot be neglected in a work such as the present. But not every culture in Melanesia lends itself to an investigation of its history; in the case of the Papuans, for instance, very little would be revealed by such a study, as the historical "awareness" of this people is but slightly developed, and their myths therefore contain scarcely any information regarding history.

The stone-using immigrants differ very strongly in this respect; they

have a highly developed sense of history, and it is no exaggeration to say that, if there is a culture in Melanesia which lends itself to an investigation of cultural history at all, it is precisely the culture of the stone-using immigrants.

Since trading relations can, in many instances, constitute an indication of old cultural contact and the migration of cultures, and add not a little to the possibility of defining the cultural climate, they have been taken into account in the present work, though in most cases there is nothing to indicate how far back these trading relations date.

In the present study we have not paid special attention to the social organization of the people, not because we underestimate its importance, but because a summary examination would add little to the solution of the problem and a thorough investigation of the question is not possible in this work.

The writer has been unable owing to the war, to obtain access to the most recent works of reference, but in view of the very extensive bibliography at his disposal, it is hoped that any lacunae which may exist will be of negligible importance.

II. MEGALITHIC MONUMENTS AND MEGALITHIC CULTURE

THE NEW HEBRIDES

Apart from the short, dark and curly haired people which SPEISER, in some of his earlier works has taken to be the original race, but which he later considered to be only an inland variety of the Melanesians, he gives the following description of the races in the New Hebrides: "A few varieties of the tall Melanesian race arrived in the islands in several migrations"; we have moreover before us "an old Polynesian element as a relic of its former migrations eastward, and a recent Polynesian element from the east... The lightest population is in the south and north-east of the New Hebrides while the darkest is in the north-west, and the ethnological difference corresponds to this division. In the Banks Islands we find, probably owing to recent immigration, more Polynesian blood than in the northern New Hebrides" ¹). The information regarding the light-skinned people in the New Hebrides does not of course enable us to decide whether this refers to an early or to a recent Polynesian element, although many writers have rashly ascribed light skin to recent Polynesian influences which are confirmed by existing traditions. But other anthropological data besides light skin must be taken into account in deciding this question. Since, in the majority of cases, fuller details of an anthropological nature are lacking, we have merely noted the characteristics of light skin and hair of peculiar texture without classifying them chronologically.

The languages spoken in the New Hebrides are all Melanesian in type, showing Polynesian influences, to a greater or lesser degree, in the various islands.

Torres Islands: Although not very much is known about the Torres Islands, and megalithic stone-work is not so highly developed as in the Banks Islands, we have thought well to begin our investigations in the former to follow the geographical succession from north to south.

Much of the stone-work here is erected in connection with the Suqe, so that any investigation of the megaliths carried out in this area must pay special attention to the secret societies.

The Suqe of the other islands is called Hukwa in the Torres Islands ²). In Loh there are nine ranks, each with its own compartment in the gemel club house. Ascending to higher ranks demands the sacrifice of pigs ³).

1) SPEISER 792 11, 790 8, 791 464; see also BOURGE 88 227 f. 2) SPEISER 789 399, DURRAD 205 (11) 89 f. 3) DURRAD 205 (11) 90, CODRINGTON 160 105.

For a small boy a ceremony is performed to introduce him to the gemel. Some stakes are set up in a row in the open space before the gemel door, and arrows and the tusked jaw-bones of pigs are tied to them. Three men walk round the row of stakes, the father following them carrying his son. By the gemel door pieces of kava root are laid down. This symbolizes the practice of kava drinking in which the boy will participate in later life. After this, a pig's jaw-bone is brought and the child is made to tap it with a little stone which is put into his hand. This, according to DURRAD, symbolizes the killing of pigs, which forms part of the ritual accompanying a rise in rank in the Hukwa. If a man of the third rank Pu-kwetegiav (corresponding to the third rank of Mota "Kwatagiav")¹⁾ wished to initiate his brother into the Hukwa, a number of stakes are set in clumps in the open space in front of the gemel, the number of clumps corresponding to the number of ranks in the Hukwa. The candidate ties his pig to a stake in the clump set up for the Pu-kwetegiav, and to other stakes in this clump are tied arrows and pig's jaw-bones. If a man wished to rise to the 7th or 8th rank, stakes were set up behind the gemel, but never more than four. The wooden pillar in these cases was of casuarina (n'ar) wood²⁾.

SPEISER, in his table³⁾ under the heading of house mounds, places an interrogation mark against the Torres Islands, signifying that their existence is probable but not proven. "The probability of the existence of such house mounds is supported by their presence in all the Banks Islands and in some other islands of the group.

The funeral rites of a man depend upon his rank in the Hukwa. For a man of the eighth rank, a large bag, decorated with cycas and hibiscus leaves, is filled with yams; and into a smaller bag, decorated in the same way, are put a piece of sugar cane, a green coconut, etc. The corpse is carried to its final resting place in the kwor, the open stone edged trench beside the gemel. The two decorated bags are hung on a stake which has been set up at the head of the kwor. Later a small casuarina tree is set up beside the kwor. The skull of a man belonging to a very high rank of the Hukwa is cleaned and placed in the topmost division of the gemel, upon a pedestal of smooth rock about ten inches or a foot in height⁴⁾. This does not seem to be identical with the stone dolmens in the club house upon which the skull is laid in Malekula, but at least functionally a great similarity is evident. In his table, under the heading "Stone-platforms", SPEISER⁵⁾ has placed a note of interrogation for the Torres Islands.

RIVERS mentions stone-work in the Loh Islands in general terms, without, however, giving any details⁶⁾.

Although I have been unable to discover any other information relating to stone-work in the Torres Islands, it is certain that the setting up of wooden stakes to which the sacrificial pigs are tied for the ceremony of ascension in

1) See COBBINGTON 160 104 f. 2) DURRAD 205 (II) 89 f, 92 f. 3) 789 450, 793 226 f. 4) DURRAD 205 (II) 94 ff, 107. 5) SPEISER 793 226 f. 6) 727 442.

the Hukwa, is merely a substitute for stone-work, fulfilling the same function, as we shall often see. This use of wooden stakes is so generally known in megalithic areas of Oceania, that it is not necessary here to emphasize their megalithic character.

Banks Islands: Though stature and colour of skin vary in the Banks Islands, light skin, however, prevails. The hair is frizzy, but soft hair is also found. As has already been indicated, Polynesian influence here is quite strong¹). CODRINGTON witnessed the arrival of Tikopian canoes in the Bank Islands; Tongans also visited the islands. CODRINGTON mentions that they settled for a short time on Kakea near Venua Lava. Many single canoes have, from time to time, been blown across from Polynesia to the Banks Islands²). Polynesian influence can also be observed in the Melanesian language of the group³).

According to SPEISER, typical megalithic stone-work does not exist in Ureparapara. The dancing grounds only are surrounded by a low wall⁴). In his table⁵) under the heading "Stone platforms" SPEISER also mentions Ureparapara, but I find no mention of this in any literature on the subject.

Although Suqe and gamal exist⁶) the sources of information give no details about the ceremonies, as far as I am aware.

The Ureparapara houses have arched roofs, and are built upon foundations of stone, as in Venua Lava. The houses of the chiefs resemble the men's houses but are smaller in size and built upon very low foundations. The houses of the women are not arched⁷). Whether these latter are built upon stone foundations too, SPEISER does not say, but COOMBE gives a photo of two houses⁸) at Leha, Ureparapara, one of which has a low foundation and a gabled roof. It is further evident, from the photographs shown by SPEISER and COOMBE, that the foundations of the men's houses are the highest (by more than three feet) and that the stone-work is built up in a very regular manner, almost resembling bricks. (Cf. Venua Lava, where men's houses are built upon high foundations, whereas the houses of the chiefs and those of the women are upon lower foundations.)

In Ureparapara the graves are surrounded by low walls and planted with dense brushwork⁹). Whether the erection of these stone walls depends upon sex or social status we have no information.

On Venua Lava the long club houses of the Suqe, the gamal, are built upon a stone foundation to the height of about three feet. The stone foundation is almost of the same length as the house itself, but is about five feet wider on each side, and thus forms a platform on both sides of the house. The walls of the foundation are very regularly built without any

1) SPEISER 789 62, 790 261, COOMBE 170 70 f. 2) CODRINGTON 160 320 f, 346, 6 Note 1. 3) RAY 705 47. 4) 789 387. 5) 793 226 f. 6) CODRINGTON 160 82, SPEISER 789 450, COOMBE 170 122. 7) SPEISER 789 122, Pl. 18 fig. 2, Pl. 12 fig. 8. 8) 170 photo to face p. 122. 9) SPEISER 789 310, CODRINGTON 160 269.

kind of cement. A few protruding stone slabs are used as steps. Opposite the gamal stands the "chief's" house, where the highest man of the Suqe lives with his family. His house, which resembles the gamal, is shorter but larger. Like the gamal, it stands upon a stone foundation. Parallel to it are the women's houses, of a similar construction to the "chief's" house, but upon lower stone foundations¹⁾. A third of the interior of the gamal is divided off by a small wall, and there the ground is raised about eight inches. Here the ovens of the highest Suqe degrees are to be found, and each of these ovens is surrounded by a stone wall, at the corners of which blocks of stone are set up vertically²⁾.

Fig. 1. shows RIVERS³⁾ plan of the gamal in the village of Vatrata on Venua Lava. The figure shows the ranks now in existence.

At that time the native Charles was the person of the highest Suqe rank in the village, i.e. the rank Kworokworolava and he wished to ascend to the degree Wometeloa. His house was opposite the gamal. On the other side in front of the gamal there are two stone platforms (wona). Directly in front of the gamal there is a small, flat, open space used as the dancing ground. The numbered crosses 1-8 show the position of the posts or trees to which pigs were tied⁴⁾. Another pig was tied to the cycas tree (9) near the gamal. "The cycas trees are planted near the door of the gamal where they will take root and grow, being the sign that a man has ascended in the Suqe." "The name for a "chief", ta vus mele, the man who kills for the cycas, suggests that the idea of chief is entirely connected with rank in the Suqe". In the interior of the gamal the division of Kworokworolava was separated from Wometeloa by a row of stones⁵⁾.

On Venua Lava, Mota Lava and Mota, the villages and gardens are surrounded by stone walls⁶⁾.

On Venua Lava women and unimportant men are alike buried near the house in a grave only slightly below the surface; men of high rank are buried much deeper, between their houses and the gamal opposite. Around their grave a stone wall is erected about two feet high⁷⁾.

From Motalava, CODRINGTON mentions an old house mound five feet high, but where no habitations now exist⁸⁾.

On Mota, as in the other Banks Islands, the Suqe with the gamal is known comprising 18 ranks⁹⁾. At initiation into the third Suqe rank, Kwatagiav, a pig is tied to a stake near the door of the gamal and a cycas tree (mele) is placed just inside the door of the gamal. Some men make a

1) SPEISER 789 121 f, Pl. 104 fig. 5, 790 Pl. 73 (right), Pl. 82 (below), 792 Pl. 46, COOMBE 170 photo to face p. 106 above. 2) SPEISER 789 384, Pl. 18 fig. 5, 790 Pl. 74, 792 Pl. 147. 3) 725 I 69. 4) These stakes are mentioned also by CODRINGTON 168 81 Note 1, from Palmer. 5) RIVERS 725 I 68-70, 72, 75, 77, 140. 6) SPEISER 789 105, CODRINGTON 160 81 Note 1, COOMBE 170 104. 7) SPEISER 789 309. 8) 160 48. 9) SPEISER 789 319, CODRINGTON 160 104 f, COOMBE 170 77 f, RIVERS 725 I 62.

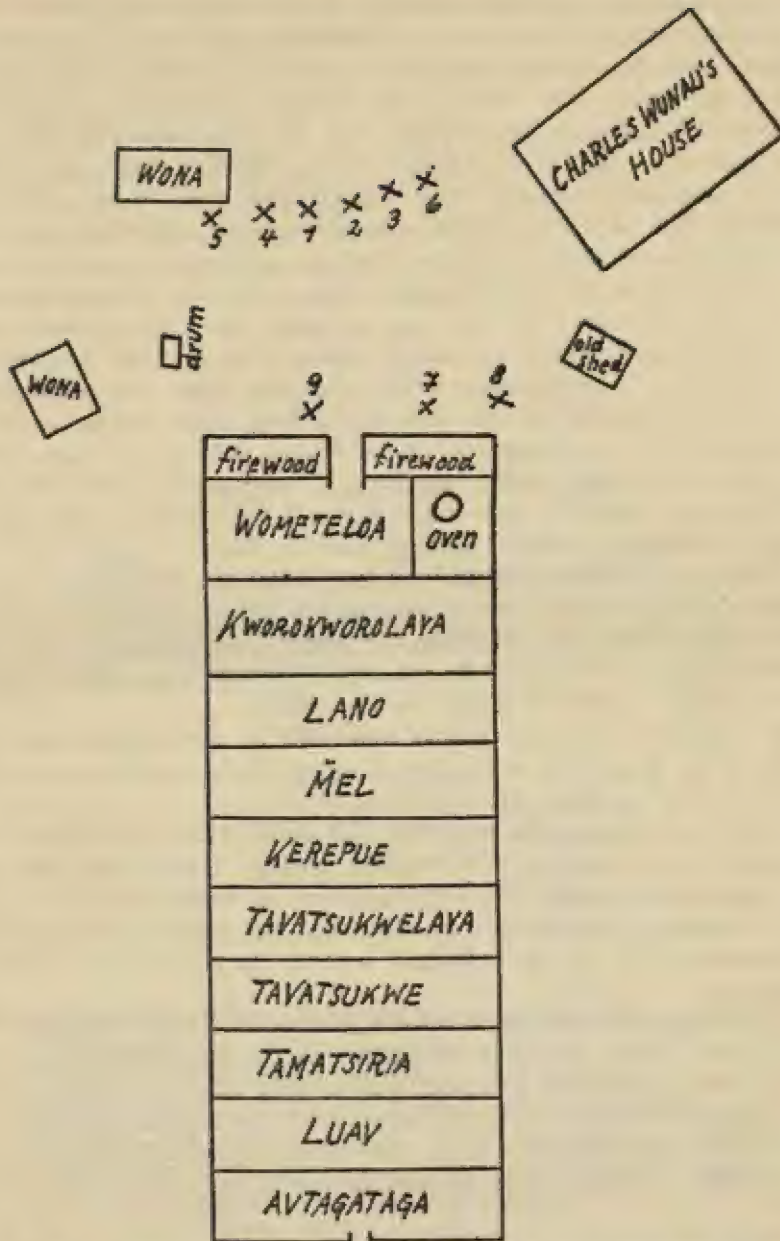


Fig. 1. Plan of Venua Lava club house. (After RIVERS 725 I 69)

whistling sound with dracaena leaves. The candidate places strings of money on the cycas tree at the door of the gamal. After all the ceremonies the cycas tree is planted outside the gamal as "the sign of Kwatagiav".

Only those belonging to the Kwatagiav division eat at the "mele" tree, and it is this eating which makes the candidate a member of that rank of the Suqe¹). At the entrance to grade 13 and 14, an image of a man is set up in the gamal. The image set up in grade 14 "carries on his head with outstretched arms a disk representing the firmament with heavenly bodies painted on it"²). The rank "Mele", "Cycas" (rank 10) exists here too, and of the cycas tree CODRINGTON says "it has a certain sanctity"³). We have unfortunately no information regarding the rites of initiation to the higher ranks, so that we are unable to say to what extent stone-work is used in the higher ranks. Of a man of high rank in the Suqe, COOMBE says⁴): "He may sit upon the stone platform just outside the gamal", and CODRINGTON relates a myth from Mota⁵) in which it is said of a certain man⁶) "He went rank after rank in the Suqe, till he came right through all the ranks of the Suqe. After that he ... makes a kolekole (feast) for a stone, a sewere, makes one for an image, nule, makes one for a gamal, makes one for a ... pig's tail, etc. etc. And his uncle killed pigs for him". This shows that it is the custom to erect stone-work at the initiation to a certain degree of the Suqe.

On Mota, the site of an ancient very long gamal can still be seen. There are stones which are said to have formed part of this old gamal, these stones being cut quite unlike any others on the island, says RIVERS⁷). It is not very clear, however, whether these are stones forming part of the foundation of a house or some other type of stone-work.

Many observers have been greatly impressed by the magnificence and diversity of the stone-work in the little island of Gaua. Nothing resembling it has been seen elsewhere in these islands⁸).

We have little information regarding the ritual of the Suqe. CODRINGTON speaks of the existence of four ranks, adding: "Those who reach the higher ranks build a gamal on a lofty platform of stones"⁹).

Of all the Banks Islands it is on Gaua that the Suqe has left its most conspicuous mark in the big walls built without mortar and the numerous stone altars.

The club houses (gamal) stand upon a foundation about 7 feet high¹⁰). They are of about the same dimensions as the houses themselves. In erecting these foundations, a smooth wall is first raised by placing large stones regularly one upon the other, after which the interior is filled with earth. In some cases the floor of the club house is paved with stone slabs. The interstices of the large foundation walls are filled with small stones¹¹).

1) RIVERS 725 64-67. 2) CODRINGTON 160 104 f. 3) 160 105. 4) 170 79 f. 5) 160 387-396. 6) 160 391 f. 7) 725 1 22 f, 100. 8) See SPEISER 790 269, 792 265, CODRINGTON 160 302, COOMBE 170 43, 67, COOTE 171 139. 9) 160 105. 10) SPEISER 790 269; in 789 121 SPEISER says about one metre; in 793 23 he says 1.5 m.; CODRINGTON says about 10 feet, 160 302. 11) SPEISER 789 121, CODRINGTON 160 302.

RIVERS¹⁾ shows the front of an ancient gamal in Gaua in which the posts are statues of solid stone-work. He was told that this building was only used by those of high rank in the Suqe. A similar stone statue was also seen by Mrs. BAKER²⁾.

Before the clubhouse was the dancing ground, the stone-work of which SPEISER has described in detail³⁾. Close to the clubhouse, which, as already mentioned, stood upon a high stone foundation, there were, in Loso-lava village for instance, quadrate stone monuments on both sides of it, measuring 7 to 14 feet in length and 7 feet in height. These are the altars upon which pigs are sacrificed. SPEISER publishes the following figure and

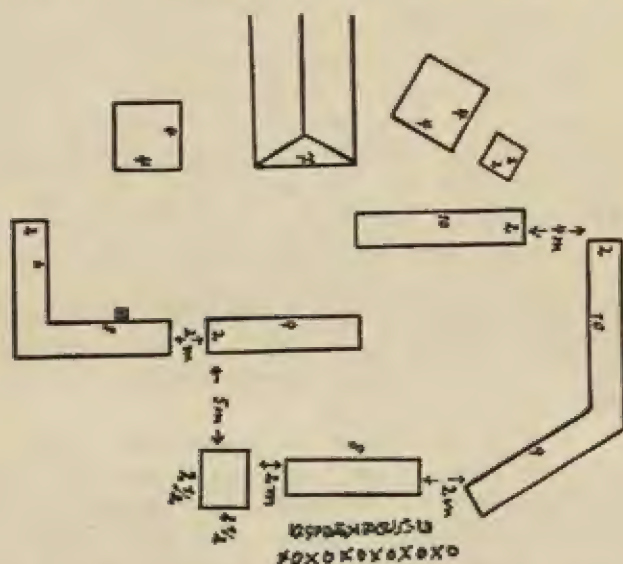


Fig. 2. Plan of club house and stone-work on Gaua

says⁴⁾: "9 mtr. quer vor dem Gamal war ein Steinwall von 2 mtr. Breite, 1 mtr. Höhe und 9 mtr. Länge, der sich nach 2 mtr. Unterbrechung nach rechts hin fortsetzte in einen ebensolchen Wall von 15 mtr. Gesamtlänge, der aber nach $8\frac{1}{2}$ mtr. im rechten Winkel nach hinten abbog. Links vom Mittelwall lag, um 4 mtr. nach hinten verschoben, ein anderer Wall von 10 mtr. Länge, parallel dem Mittelwall. Vor dem Mittelwall befand sich in etwa 5 mtr. Abstand auf der linken Seite der Anlage eine weitere Wall Linie, bestehend aus einem medianen Teil von 8 mtr. Länge und einem lateralen von 19 mtr. Länge, der aber nach 9 mtr. Länge um etwa 45 Grad nach hinten abbog, so aber, dass der äussere Schenkel mit der Längsachse des

1) 725 I 63 Pl. III fig. 1. 2) BAKER 40 220, 232, and Pl. to face p. 221, to the left.
3) 789 387, 790 269 f. 4) 789 Pl. 81 fig. 12 and p. 387; see also 793 23 f.

Gamal parallel lief. Dem Gamal gegenüber, etwa 16 mtr. davon entfernt, war noch ein Altar von $2\frac{1}{2}$ mal 2 mtr. Seitenlänge und etwa $1\frac{1}{2}$ mtr. Höhe. Vor dem vorderen medianen Wall lag in 2 mtr. Abstand noch eine kleinere Mauer und davor war eine Reihe abwechselnd von Zykaspalmen und Statuen. Ferner standen Zykaspalmen überall zerstreut den Wällen entlang, sowie auch noch zahlreiche Statuen¹⁾. ... Die Mauerwälle dienten als Tanzböden für die ... Sugemitglieder."

The walls differed in structure, being either of flat stone slabs carefully placed together, or built up with bigger blocks of basalt²⁾. After having described the stone foundation of the gamal of Gaua, CODRINGTON says³⁾: "Besides these platforms there are two or three obelisks about four feet high, and a little dolmen of three stones. There are also two wona platforms, such as are always seen near a gamal, but much larger, and built of large stones very squarely put together. In one of these is a passage for pigs with a stone lintel." That these dolmens, stone altars and monoliths had been erected in connection with the Suqe, is mentioned by CODRINGTON who says that they "proceeded from the ambition or the fancy of a single man ... when he reached the rank in the Suqe in which he had no equal"⁴⁾.

In the club house each rank has its own fireplace. This is surrounded by a stone wall⁵⁾.

Men of high rank do not live in the club house but in a special house nearby which differs from the gamal only by its lower foundation⁶⁾. Also the living houses of ordinary people resemble those of the "chief", and are built upon stone foundations too⁷⁾.

SPEISER, in drawing attention to the magnificence of these different types of stone-work says: "These monuments must have demanded an extraordinary amount of work, but nothing in comparison with the labour needed to erect the countless interminable stone walls which cover almost the whole of the island like net work, and surround the gardens and villages. Stone walls are also to be found on other islands, but these, for the most part, are merely long, low stone heaps, whilst here the walls are about the height of a man, artistically composed of blocks of stone. The total length probably amounts to several hundred miles if one bears in mind that the track runs for hours between these walls like a narrow alley". Special doors were made for the passage of pigs. These doors were covered by a primitive arch or big stone slab, and were closed by stones. The people climb over these walls⁸⁾.

Among the stones used for building these walls or the house foundations,

1) See also COOTE 171 139, 172 76; SPEISER 792 265 expresses the opinion that these statues of tree-fern wood are "not so much images of the ancestors, as signs of rank and wealth". 2) SPEISER 790 269. 3) 160 302. 4) 160 303. 5) SPEISER 789 384, Pl. 86 fig. 1, 790 Pl. 74 above. 6) SPEISER 789 121, Pl. 89, fig. 4, 793 23, 790 Pl. 71, 792 Pl. p. 255, COOMBE 170 Pl. to face p. 61. 7) SPEISER 789 Pl. 12 fig. 4. 8) SPEISER 789 105, 121, 146, Pl. 86 fig. 3, 790 269 f, 793 24, COOMBE 170 Pl. to face p. 56 below.

great boulders may often be found hollowed out like a round oval bowl. Nothing is known about these stones or for what purposes they were used; they are found especially on the east side of the island of Gaua and are undoubtedly artifacts. To-day they are often used as water containers for "chiefs" or they are set up on the dancing grounds and considered as "more or less sacred" ¹⁾. The faultless skill with which they have been worked—a technique which is to-day a lost art—excludes all possibility of their having been made by the present natives, and tends to confirm that they are relics of a people who have passed away ²⁾. The meaning of these stone bowls will become clear later on. It may be said here, however, that they have hitherto constituted one of the greatest problems of Oceania.

I have found no mention in any of the sources of information in regard to the use of megalithic stone-work in connection with burial.

On Meralava only the nobility of the Suqe might sit upon the platform of stones to be seen in each village ³⁾.

SPEISER has not visited Meralava, but basing his observations on a photograph published by COOMBE ⁴⁾ he says ⁵⁾: "Since on the whole of the island there is no flat ground, the houses are built upon terraces, the slopes being supported by stone walls". According to COOMBE ⁶⁾ only the houses of men belonging to high Suqe ranks may be built upon stone foundations.

Having reached this point in our study, we can already draw the following conclusions: first, we have seen the close connection which exists between the Suqe and the erection of megalithic stone-work. In ascending to a higher rank in the Suqe, wooden stakes to which the pigs to be sacrificed were tied were set up in front of the gamal (Torres Islands, Venua Lava, Mota). Apart from the case of Mota, where a feast was prepared for a "stone" and the "obelisk" near the gamal of Gaua, information which is somewhat vague, I know of no erection of monoliths in connection with ascension in the Suqe from the Torres Islands and Banks Islands. This may, however, be due partly to the fact that the information at our disposal refers, for the most part, to the ceremonies of the lower ranks in which wooden stakes were set up, whereas the erection of monoliths is typical only for the higher or the highest ranks.

A man of high Suqe rank was buried in the stone edged trench beside the gamal (Torres Islands) and on Venua Lava a stone wall was erected upon his grave which was near the gamal. The gamal of the Suqe, and the houses of high Suqe members are built upon stone foundations (Urepapara, Venua Lava, Gaua, Meralava). In front of each gamal there are different kinds of stone monuments (wona platforms in Venua Lava and Gaua; in Mota and Meralava only a man of high Suqe rank may sit upon these stone platforms). These altars and stone walls have found their

1) SPEISER 789 349, Pl. 73. 2) SPEISER 789 95, 349, Pl. 18 fig. 4, 797 183, 792 265, 790 270, 801 398, COOMBE 170 67. 3) COOMBE 170 43. 4) 170 42; the same photograph is published by IM THURN 873 277. 5) 789 105, 121. 6) 170 43.

highest development on Gaua Island, where they stand in front of the gamal also. The pigs to be sacrificed in the Suqe rites are killed upon the altars, and the members of the Suqe dance upon the stone walls.

Besides these functional connections between the Suqe and the megalithic use of stones, we have also seen that the distribution of the Suqe corresponds to the distribution of megaliths in the Banks Islands; this becomes still more evident as our investigation proceeds. The Suqe is in fact found in all the Banks Islands¹). These two facts alone would be sufficient to prove the genetic connection between megaliths and the Suqe.

Sacred plants. We must now turn to a problem which will be of the utmost importance in the course of this investigation, viz. the problem of sacred plants. In the information given about the Banks Islands we have already come across the following plants used in the ritual of the Suqe: In the Torres Islands, where the Suqe possessed nine ranks, stakes were set up in front of the gamal for the lower grades. For the ascension from the seventh to the eighth grade these stakes, which in this case were set up behind the gamal, were of casuarina wood (n'ar). At the funeral rites of a man of the eighth rank bags decorated with cycas and hibiscus leaves were hung on a stake set up at the head of the grave. Later a small casuarina tree was set up beside the grave. In Venua Lava, where ten ranks existed, nine stakes were set up before the gamal when ascending from the ninth to the tenth grade. The ninth stake was the nearest to the gamal, and was a cycas tree (mele), and to this, as to the other stakes, a pig, for sacrifice, was tied. As has already been mentioned, RIVERS informs us that the cycas was considered to be a sign that a man had ascended in the Suqe, and he adds that a "chief" i.e. a man of the highest rank of the Suqe was called "ta vus mele", i.e. "the man who kills for the cycas". From this it may be seen that there is close connection between the cycas plant and the Suqe. When ascending to the third rank of the Suqe (rank "Kwatagiav") in Mota, a cycas tree, here called "mele" too, was planted outside the gamal as "the sign of Kwatagiav" and pigs were tied to it before being sacrificed. In this, and in some of the other ranks, the eating by the side of the mele tree is one of the most important parts of the ceremony. A whistling sound, it will be remembered, is produced with dracaena leaves. It must also be added that the tenth rank in Mota was called "Mele", "Cycas"²) and the seventh rank in Venua Lava was called "Mel"³) which certainly also means cycas. We shall come across the cycas palm repeatedly under the name "mele" or similar names in the ceremonial life, and as grade names of the Suqe. On Gaua, cycas palms were planted along the stone walls upon which the members of the Suqe used to dance.

Since, as has already been mentioned, it is of the utmost importance to recognize the ceremonial use of plants as a very characteristic indication

1) See SPEISER 789 399, 450, COOMBE 170 43, 77 f, 88, 152 f, CODRINGTON 160 82, 104 f, 287, 386, RIVERS 725 I 79, II 315. 2) CODRINGTON 160 104, "Mwele" according to RIVERS 725 I 62. 3) RIVERS 725 I 69.

of the presence of the stone-using immigrants in those regions where their influence was not so strong as in the New Hebrides, we shall quote all the information available regarding the use of these plants in the New Hebrides.

In my previous work *Fruchtbarkeitsriten in Melanesien* I have endeavoured to show that the use of croton, dracaena and cordyline in the whole of Melanesia, in ritual and magic, is a characteristic feature of megalithic culture of Melanesia. This brief survey will be developed in the present work.

In the Torres Islands the spirits of the dead are believed to go to Panoi, the country of the dead, near a certain rock on the seashore near which a very ancient casuarina tree is growing¹). The following magic is usual against disease: The practitioner takes a switch of a cordyline bush, goes to some sacred spot whither the sick man's life may have been taken, and there lashes the ground. The life is supposed to enter into the stick, which is then carried back to the sick man and laid beside him²).

The description of the funeral of a man of rank at Mota Lava will hold good, says CODRINGTON, generally for any of the Banks Islands. The corpse of a great man before burial was treated in the following way: on his breast they placed a cycas leaf, mele, the mark of his rank in the Suqe, and the leaves of the crotons, sasa, belonging to his Tamate societies. By his side were heaped all kinds of food with a bunch of the leaves of a particular dracaena stuck upon the heap, the karia garame tamate, the ghost's tongue dracaena, all of which were afterwards heaped upon the grave³). Croton bushes and cycas palms were planted on the terraces formed by the protruding stones of the foundations of the club houses⁴).

On Mota the entrance of the gamal "was screened with cycas fronds, a taboo sign put up by the Suqe"⁵). A man of high Suqe rank may also wear or set up certain very "taboo" kinds of hibiscus. Some red and white hibiscus are used as taboo sign of the Suqe⁶).

Within the thousand days following the death of a man of importance on Gaua, death feasts are celebrated periodically. The fronds of the cycas palm serve as calendar, one leaflet being pinched off or turned down every day⁷). In the magic for sunshine, it is recommended, after the magical act has been finished to "hang your sun stone on a casuarina tree, as being also sacred"⁸). According to the version of the Qat myth of Gaua, Qat formed men out of a dracaena⁹). The importance of the Qat myth in connection with the problem of megaliths will be discussed later.

In Meralava it is customary for a man who wishes to adopt a child about to be born to run quickly to plant the leaf of a cycas tree in front of the mother's door, after which a payment is made¹⁰).

1) CODRINGTON 160 265. 2) DUKRAD 205 (III) 195. 3) CODRINGTON 160 268.
4) SPEISER 789 122. 5) COOMBE 170 78. 6) COOMBE 170 79 f. 7) COOMBE 170
p. 63; CODRINGTON makes the somewhat general remark that "the use of the cycas
leaf for counting is common to the Banks Islands and the New Hebrides." 160 353.
8) COOMBE 170 65. 9) CODRINGTON 160 157. 10) RIVERS 725 II 401.

These examples show that the casuarina, cycas, croton, dracaena and cordyline play an important part, in various ways, in the ceremonial life of the Suqe, that they are connected with megalithic stone-work, and that they are used in different types of magic.

CODRINGTON has already remarked upon the sacred character of some of these plants, and, speaking of the Banks Islands generally, he says "croton and dracaenas have a certain sacredness in connection with the dead" ¹⁾. COOMBE says: "The brilliant-leaved croton has in many islands rather a sacred character, and I fancy it was among the beautiful foliage-plants that one of our early missionaries in Maevo collected for the adornment of the little garden round his house. Just in time he made the tiresome discovery that all these were tapu to ordinary folk, and that therefore not only would no woman venture near, but no one could come to school save the few who had attained a rank in the Suqe high enough to admit them to familiarity even with the plants of the ghosts" ²⁾. CODRINGTON says furthermore: "There are two trees which have a certain inherent sacredness of their own, the casuarina, aru, and the cycas, mele" ³⁾. SPEISER thinks that the cycas palm is not in itself sacred, but that its sacredness is due to the fact that it is a badge of the ranks of the Suqe. This applies also to the different kinds of croton ⁴⁾.

We have already seen that croton was used as a badge in the Tamate Society on Motalava. Since other plants are also used in the ceremonial of this society, and as the Tamate is also closely connected with the Suqe, we must turn our attention to the study of the Tamate. The Tamate, as well as the Suqe, exists in all the Banks Islands ⁵⁾. Whereas the typical meeting place of the Suqe is the gamal club house, the Tamate meet in the bush, in the salagoro. There the sacred objects of the Tamate, especially the masks and hats are manufactured and kept. The Tamate societies are very numerous, and in Mota alone there are no less than 70 of them. Since there are higher and lower Tamates the payment for entrance is correspondingly higher or lower ⁶⁾. Whereas CODRINGTON considered the Suqe and the Tamate as two distinct institutions ⁷⁾ RIVERS has shown that a definite connection exists between them ⁸⁾, since each rank of the Suqe has connected with it a hat or mask; "and since they resemble the masks or hats of the Tamate societies, and like them are called tamate, it seems probable that we have in their existence the survival of a relation between the Suqe and the Tamate societies, which was once closer than that which exists at the present time" ⁹⁾. Further, admission to the Tamate liwoa is necessary for the progress to higher ranks in the Suqe;

1) 160 187. 2) 170 32 f. 3) 160 186, 217, 162 278, 313. 4) 789 350.
5) CODRINGTON 160 69, 72, 74, 76, 81, SPEISER 789 376, 793 73, COOMBE 70 88, 103, RIVERS 725 I 6, 87, 89, II 223, 315, DEACON 184 271 etc. 6) RIVERS 725 I 87-90, 95, 110-119, 128, CODRINGTON 162 287 f, COOMBE 170 81. 7) 160 102. 8) 725 I 61.
9) RIVERS 725 I 81.

thus in Mota Island, for instance, the sixth rank of the Suqe, "Tavatsuqe", cannot be entered without membership of Tamate liwoa ¹⁾). RIVERS emphasizes that this cannot be a recent modification ²⁾). Further, it is important that the initiation into the Tamate liwoa, which is the chief Tamate society, has many points of contact and similarities with the initiation into the Suqe. At the initiation into the Tamate liwoa of Mota, six stakes of var (hibiscus) wood are set up in the centre of the village opposite the door of the gamal. The candidate, who is decorated with flowers of hibiscus and croton, moves ceremonially from one stake to the other ³⁾).

RIVERS' opinion of a genetic connection of the Tamate and Suqe is confirmed also by the fact that some of the sacred plants used in connection with the Suqe and the megalithic stone-work are also used in the Tamate societies. In the Torres Islands the badges of the Tamate society are hibiscus flowers worn over the forehead ⁴⁾). Round the salagoro of Mota Island there were a number of cycas trees ⁵⁾). Again, a man may plant a cycas in his garden as a sign that this is the lodge or resting place of a tamate ⁶⁾). The path to the salagoro is tabooed with cycas fronds ⁷⁾). If a candidate of the Tamate of Mota infringes one of the ceremonial rules, a cycas tree thrown down in front of the salagoro is the sign that a fine has been imposed ⁸⁾). Of the Banks Islands generally CODRINGTON says that the hats of the Tamate masks meet the cloak with a fringe of cycas leaves and the Tamate dancers each hold a cycas frond in the hand ⁹⁾).

In Mota the leaves of a large number of varieties of croton are used as badges for the many Tamate Societies, and to protect the property of its members ¹⁰⁾). Among the many badges of the Tamate Societies in Mota, RIVERS mentions, among others: red croton (memea, kariura), white croton, green croton (turturuga), yellow croton, very long and thin croton, speckled croton, black croton (silsiliga), croton called tamatpaso, etc. and also a piece of the stem of the hibiscus (var), a coconut leaf stuck upright in the ground, etc. etc. ¹¹⁾). Some of the Tamate Societies of Mota had been introduced from Venua Lava and in some cases the variety of croton used grows only on Venua Lava, so that the Mota people have to get it from

1) RIVERS 725 I 128. 2) 725 I 126. 3) RIVERS 725 I 102; with regard to the distribution of the Tamate societies from the Torres Islands as far south as Malekula and Ambrym see the following literature: Torres Islands: CODRINGTON 160 76; Ureparapara: CODRINGTON 160 81 f, COOMBE 170 122; Mota Lava: SPEISER 789 376, COOMBE 170 88; Venua Lava: CODRINGTON 160 81 Note I, RIVERS 725 I 89, COOMBE 170 103; Mota: RIVERS 725 II 223, I 95, 115 f, 87, 126, 128, CODRINGTON 160 75, COOMBE 170 80 f; Meralava: RIVERS 725 II 315, COOMBE 170 43; "Banks Islands": RIVERS 725 I 61 f, 81, 87, 6, PARKINSON 630 662, CODRINGTON 162 288, 160 69, 72, SPEISER 793 73, DEACON 184 721; Pentecoste (Southern): CODRINGTON 160 84; Malekula: Cf. Nalawan, Nimangki Tiel, etc. 4) CODRINGTON 160 76. 5) RIVERS 725 I 89, 96. 6) RIVERS 725 I 89. 7) COOMBE 170 81; recorded of the Banks Islands generally by CODRINGTON 160 77 and RIVERS 725 I 62. 8) RIVERS 725 I 103. 9) 160 78, 84. 10) RIVERS 725 I 92, 94, CODRINGTON 162 288. 11) RIVERS 725 I 96, 111-119, see also COOMBE 170 80.

there¹⁾. Of the Banks Islands generally CODRINGTON records the use of croton leaves as badges of the Tamate Society and croton and hibiscus flowers as decoration of the Tamate dancers²⁾.

Maovo: Two different racial types can be distinguished on Maovo; the one small, dark-skinned with frizzy hair, the other tall, light-skinned with wavy hair, sometimes inclined to become corpulent³⁾. Although the institution of the Suqe and the gamal do exist on Maovo⁴⁾ the Suqe is, nevertheless, not so strongly developed here.

We have no source from which we can draw any information of interest regarding the ritual of the Suqe. SPEISER mentions "old stone altars", but gives no details⁵⁾.

On Maovo as well as on Pentecoste, a distinction must be drawn between the two regions—the mountainous district in the south, and the coralline plateau in the north. In the south the houses stand upon stone foundations mostly built of stone blocks. The terraces are often paved with stone slabs. The dwelling houses, as well as the club house, stand in groups of two, three, or four houses on a common terrace. On the broad flat tableland of Northern Maovo, the dwelling houses are built directly on the ground. The club house is built upon a stone foundation on the dancing ground⁶⁾.

By the side of the gamal on the dancing ground of Maovo are the burial places said to be "chief's" graves, each surrounded by a ring of stones about a foot high, and near the graves a large monolith is often set up⁷⁾. Furthermore, great heaps of stones much larger than are now made are seen where men of old times were buried. The stone heaps are erected on the fifth day after death⁸⁾.

The gardens are very often surrounded by stone walls instead of fences⁹⁾.

Near a Maovo village SPEISER found a bowl-like stone slab upon which there was a round stone ball. "I think", says SPEISER "that this must be an instrument for ceremonial purposes, similar to the stone balls of Lamén"¹⁰⁾. SPEISER found those of Lamén on Epi lying on a stone table, and they were said to have been used for the killing of the pigs for sacrifice¹¹⁾. I think it very probable that these stone balls may be compared with the "stone child" which we shall find later in Seniāng (Malekula). Unfortunately we have very little information regarding their function on Malekula either.

1) RIVERS 723 1 119, 121. 2) 160 82 f, 75. 3) SPEISER 789 61, 790 98, 793 216, DEACON 184 703. 4) SPEISER 789 382, 793 73, COOMBE 170 33, COOTE 171 64 f, 130 f, CODRINGTON 160 112, 280, 396. 5) 790 99. 6) SPEISER 789 104, 120 f, Pl. 17 fig. 2, 790 99; a photograph of a similar gamal upon a stone foundation is also shown by COOMBE 170 photo p. 31 above. 7) SPEISER 789 104, 309, 387, 790 100, COOTE 171 132, 172 67. 8) CODRINGTON 160 48, 281, SPEISER 789 104, 309, 318, Pl. 80 fig. 6. 9) SPEISER 789 146. 10) 789 246. 11) SPEISER 789 Pl. 104 fig. 4.

Sacred Plants. With regard to the dancing grounds upon which we have found the stone graves and the monoliths, SPEISER says: "It seems that the dancing grounds were little places before the men's houses planted with cycas palms. The graves themselves are surrounded by a stone wall and planted with croton and cycas" ¹).

The badges of the Suqe here too are leaves of croton, dracaena and cycas, and in a myth of Maevo mention is made of a croton tree by the side of the gamal. Not only are cycas leaves the badge of the high ranks of the Suqe, and are planted upon the graves and all sacred places, but "in almost every rite, at Suqe feasts and in magic a cycas leaf is used" ²). If a man's pig is lost he will go to the grave of a kinsman, put on the stones above it a tuft of dracaena or croton leaves and say: "Get me back my pig" ³). Generally speaking JOLY says "Comme dans beaucoup d'autres îles on y voit des hibiscus, des crotons, mais plus abondants, plus soignés" ⁴).

Aoba: On this island many people are light-skinned, with straight or wavy hair and Mongolian features ⁵).

The Suqe with the gamal (called here gamali) exists also on Aoba where it is called "Huge" ⁶). But here it is not of the same importance as on the other islands ⁷). CODRINGTON mentions only four ranks of Aoba viz. toa, moli, levusi and vire but says that moli is subdivided into five ovens and levusi into two ⁸). SPEISER mentions ten ranks ⁹) and DEACON says: "In Omba the highest grades are called Moli and Liwuhi" ¹⁰), which correspond to the "moli" and "levusi" of CODRINGTON. DEACON gives the following description of the Suqe ritual: "At entrance to Moli a pig is hoisted up into a cycas tree and killed on the tree. At the entrance of Liwuhi twenty stakes are driven into the ground in a line, and to each stake is bound 1) a mele leaf (cycas), 2) a croton branch, 3) a yucca leaf. A pig is tied to each stake and killed in turn. At the entrance to this grade, a stone "tower" is set up, on top of which is placed a canoe with a mat sail. One pig only is killed on this tower and this pig is then burnt and not eaten. This setting up of the canoe on the stone and the killing of the pig hereon, is to commemorate the coming of the first pigs of the hungwe from Malo to Omba" ¹¹).

In Aoba the villages are composed of several family compounds near the dancing ground. These consist of two dwelling houses and a certain number of kitchen and store houses. In the south-west of the island the

1) 789 387; see also COOTE 171 132, 172 67. 2) CODRINGTON 160 112, 396, SPEISER 789 350 f. 3) CODRINGTON 160 143. 4) 419 367. 5) SPEISER 789 61, 792 242, 793 216, JOLY 419 367, HARRISSON 343 259, DEACON 184 703, BOURGE 88 144. 6) This is according to CODRINGTON 160 113, 210, SPEISER 789 382, 398, 450, 790 236, 238, 792, 244, 793 73, COOMBE 170 24 f, RIVERS 725 11 227; according to DEACON it is called "Hungwe", DEACON 185 497. 7) SPEISER 790 237. 8) 160 113. 9) 790 66, 792 100. 10) 185 497. 11) 185 497 f.

houses stand upon a common terrace about two and a half feet high, the walls of which are built of stones. In the north-east they stand directly on the ground, and before the houses there is a wide open space. A certain number of these compounds form a village. Within a certain distance of the village there is the men's house. The family compounds of men of high Suqe rank are also distant from the village. This is a big place surrounded by a stone wall, containing one or two dwelling houses, the kitchen house, store house, graves, etc.¹⁾ With regard to the stone walls surrounding the "chief's" compounds, SUAS says that they are "soit en pierre... soit en bois... et souvent des deux à la fois pour mieux empêcher les regards indiscrets, et les deux bouts de cette barrière rentrent l'un dans l'autre"²⁾. With regard to the family houses, SUAS says: "La plupart de ces maisons sont sans barrière aucune. Cependant, en plusieurs endroits, ces maisons de famille sont entourées d'une palissade en bois vivant ou bien d'une barrière en pierres doublée d'un treillis en roseaux... Ces barrières en effet, ne sont autre chose que de pierres seches posées l'une sur l'autre, sans aucun mortier et de l'épaisseur d'une pierre. Elles sont donc forcément à jour, et ne peuvent guère dépasser 1 m de haut sans retomber au moindre accident"³⁾.

The stone walls surrounding the groups of houses and family compounds closely resemble those of Vao and Pentecoste, except that they are built of volcanic stones instead of coral blocks⁴⁾. The gardens are often surrounded by stone walls instead of fences⁵⁾.

The dancing grounds before the gamal are irregular in form and usually surrounded by stone walls. Several graves are to be found on these grounds⁶⁾. These graves are rings of stones seven to seventeen feet in diameter and about three to five feet high, filled with earth. A cycas palm is always planted upon them, and often also a croton bush corresponding to the rank of the dead; the higher the rank, the higher is this earth heap and the greater the diameter of the stone wall. Women are buried in the same manner, but their graves are small⁷⁾. A "chief's" grave is used for only one body, whereas in the other graves several bodies are buried together, thus forming a kind of family grave. A cycas palm is planted for everybody. Near the graves there are altars upon which pigs are killed. These altars are stone walls about three feet high filled with earth. Their form varies, sometimes being round, sometimes quadratic with protruding corners, of the form of a pig's jaw, etc. They correspond to the similar monuments of Ambrym where, too, as in Northern Pentecoste, cycas palms are often planted along the dancing ground and round these altars⁸⁾.

1) SPEISER 789 104, 110 f, Pl. 10 fig. 7, 8, Pl. 17 fig. 1, Pl. 80 fig. 1. 2) 807 63 f. see also FESTETICS DE TOLNA 234 Pl. p. 225 below. 3) 807 764. 4) SPEISER 789 120. 5) SPEISER 789 146, 790 239. 6) SPEISER 789 Pl. 80 fig. 1, 790 Pl. 50. 7) SPEISER 789 309. 8) SPEISER 790 Pl. 51 p. 160, 239, 242, 789 308 f, 387 Pl. 90 fig. 9, Pl. 91 fig. 7, Pl. 87 fig. 2, SUAS 807 760.

SUAS gives the following information with regard to the disposal of the dead on Aoba¹): "Autrefois il y avait des cimetières par familles, aujourd'hui on enterre n'importe où, le plus souvent près de la case du mort, et pour les chefs à côté de la place publique (sara)... On fait une barrière en pierre (guara) au dessus de la tombe... On remplit le milieu de terre et on y plante du kava (maloku) et des plantes d'ornement (sori)".

In his table²) under the heading "monolith upon graves" SPEISER mentions Aoba, Maevo and Pentecoste, but as far as I know, the records do not mention it for Aoba; but in view of the similarity between the graves of Aoba, Maevo and Pentecost (rings of stones filled in with earth) and the custom of erecting monoliths on graves in Maevo and Pentecost, the erection of monoliths on graves in Aoba would not be astonishing.

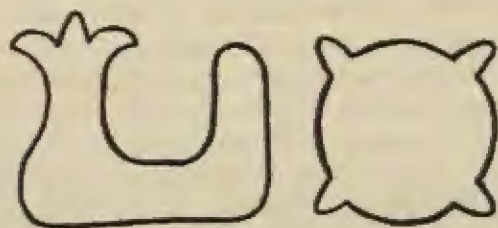


Fig. 3. Altars on Aoba.
(After SPEISER 789 Pl. 90, fig. 9, Pl. 91 fig. 7)

Sacred Plants: The cycas palms which we have found in the ritual of the Suqe, on the stone graves of the "chiefs", on the dancing grounds and round the stone altars, are, according to SPEISER, "brought into connection with all supernatural things"³) and CODRINGTON also mentions, in regard to Aoba, that "the cycas tree has a sacred character"⁴). Cycas palms are found near the houses of an important man, i.e. a man of high Suqe rank; cycas leaves are used as badges in the Suqe, and the men of high Suqe grades often have a cycas leaf tattooed on their bodies⁵).

Croton, the importance of which in the Suqe we have already mentioned and which is planted round the stone graves, is also planted round the dwelling houses of the "chiefs"; croton leaves are worn as decoration at feasts, and in the ascension in the Suqe the first fire of the new rank is produced on a plough decorated with leaves of cycas and croton⁶).

Finally, we must mention the ceremonial use of the dracaena, for which, however, in Aoba, we can enumerate very few examples. For infant betrothal the boy gives a young coconut in the eye of which he puts a dra-

1) 807 770 f; see also SPEISER 789 Pl. 80 fig. 1. 2) 793 73. 3) 790 242. 4) 160 224. 5) SPEISER 789 191, 351, 790 242, 246, 792 251. 6) SPEISER 789 120, 402, 409, 790 238.

caena leaf, to the mother of the girl for the child to drink ¹⁾; and a bride holds a branch of dracaena in her hands; it is planted later in the middle of the dancing ground of the husband's village, and the relatives of the bride dance round it ²⁾).

Pentecost: Although there are important differences between Northern and Southern Pentecost as regards customs, race, language and social organization ³⁾ due to the fact that Northern Pentecost was peopled from Aoba, and Southern Pentecost from Ambrym ⁴⁾, the Suqe is nevertheless found in both regions ⁵⁾. The word Loli takes the place of Suqe but the two societies are the same. Wherever there is a dwelling house there is also a gamal. There are 12 divisions ⁶⁾. Rank 4 is called gabi rara, the oven of the erythrina leaf, which is the badge of the rank; rank 5 is called "woda", the stone-wall seat by the front of the gamal, on which no one below this rank may sit ⁷⁾. These five were the inferior steps. The first important rank is the sixth rank, moli ⁸⁾. Since SPEISER says of the dancing grounds of Southern Pentecost: "Stone-work is absent, and therefore also sacrificial altars" ⁹⁾, CODRINGTON's information must probably apply to Northern Pentecost. This is all the more likely as men's houses do not exist in Southern Pentecost, whereas they are found in Northern Pentecost ¹⁰⁾.

COOMBE mentions a "chief" of Pentecost who "had just finished making a feast which included a human sacrifice... The usual row of fifty pigs had been tied to the quasi-sacred cycas trees in front of the gamal, and last of the row a man" ¹¹⁾. This is confirmed by SPEISER ¹²⁾ who says of Northern Pentecost that the dancing grounds are long rectangular spaces which have been flattened out by levelling off the slopes. Instead of the rows of stones set up to record the number of pigs sacrificed, long rows of cycas palms, planted during the feasts, border the place. On the old dancing grounds the number of palms is considerable.

In South Pentecost, where there are no men's houses, two or three houses generally stand upon a common stone foundation ¹³⁾. SPEISER thinks these stone foundations are necessary to level up the steep slopes which are

1) CODRINGTON 160 241. 2) SPEISER 789 295. 3) See SPEISER 789 90, 790 219, 792 236 f, DEACON 187 143, 184 698 f. 4) SPEISER 789 57, 793 212, 791 464, RIVERS 725 1 189, TATTEVIN 855 460 f, 856 (1931) 498 f. 5) SPEISER 789 450, 790 215, COOMBE 170 6-8. 6) RIVERS, who obtained only very little information about the Loli was informed of the existence of seven ranks only, for some of which he gives other names. 725 1 204, 210 f. 7) This corresponds to the "wona" stone platforms of Venua Lava and Gaua and the stone platforms of the other islands mentioned, upon which only a man of high Suqe rank was allowed to sit. 8) CODRINGTON 160 114 f, TATTEVIN 855 460. 9) 789 386. 10) SPEISER 789 119. 11) COOMBE 170 10. 12) SPEISER 789 387, 790 220 f. 13) In his tables 789 450 and 793 226, SPEISER mentions stone foundations also in North Pentecost, but contradicts this information in 789 119 and 790 210.

very frequent there¹). The space before the houses is paved with stone slabs²).

In South Pentecost the whole village is often surrounded by a low wall of coral slabs piled one upon the other. In the north, villages are surrounded by bamboo fences, and only rarely stone walls are found³). But here the club houses are found again. SPEISER says he cannot confirm CODRINGTON's information about Pentecost according to which the ovens of the men of high Suqe rank in the club houses were surrounded by stone walls⁴).

There are often stone walls instead of fences round the gardens⁵).

On the west coast, between Namaran Bay and Batnapni Bay "on aperçoit encore des restes de barrière en pierres et quelques cika (arbres sacrés) très vieux... C'est là qu'habitait jadis le grand chef Tortali". This "chief" is mentioned in a myth which will be discussed later. This myth also relates, among other things, how a woman who goes to the "chief" is received by him with the following words: "Comment as-tu osé, toi, femme, franchir la barrière sacrée du grand chef? Ne sais-tu donc pas que tu mérites la mort"⁶)? We have come across on Aoba, stone walls surrounding the houses of high members of the Suqe, as will be remembered.

COOMBE says of Pentecost⁷): "Sometimes in approaching a village a pile of stones will be noticed on either side of the track. These are "Peace stones", a sign that the inhabitants of the village and their chief are at peace and wish to remain so. Sometimes a bundle of cycas fronds serves instead of the heap of stones." This information, as far as I know, is not mentioned by any other author.

A great man is buried in the village place in a qaru, with stones set up and with dracaenas and other coloured shrubs planted round. After the burial they go on "eating the death" for a hundred days, which are counted on a cycas leaf⁸). Although the form of this grave is not described, it is certain, nevertheless, that it is identical to the stone-ring graves filled in with earth of Maevo, Aoba, etc. This may also be concluded from the name "qaru" which corresponds to the "guara" of Aoba and the "kwor" of the Torres Islands. In all these cases, the graves are at the side of the gamal on the dancing ground. Furthermore, in his table⁹) under "Stone rings round graves" SPEISER, besides Maevo and Aoba, also mentions Pentecost. COOMBE says of the Pentecost graves¹⁰): "The place is always near the gamal and dancing ground... It is walled and heaped with stones, and is frequently, they say, shaped like a canoe¹¹) with the thought of the voyage the departed have taken. Sometimes it is planted with the sacred cycas

1) CODRINGTON 160 48, mentions: "ancient house sites raised perhaps a yard above the ground". 2) SPEISER 789 119, 790 219. 3) SPEISER 789 104, 119. 4) SPEISER 789 384, CODRINGTON 160 114. 5) SPEISER 789 146. 6) SUAS 806 902 f. 7) 170 10 f. 8) CODRINGTON 160 287, see also SPEISER 789 119, 387. 9) 793 73. 10) 170 16 f. 11) This is not confirmed by anybody else.

palm. In the wall is a small hole through which the ghosts may escape into the future world." This last statement is very interesting, since it reminds one in some way of the so-called "Seelenloch" which, in its typical form, is very rare in Melanesia, as we shall see later.

SPEISER mentions, as one form of burial, the interment under large monoliths on earth mounds ¹⁾ and CODRINGTON also speaks of "a multitude of sepulchral stones" at "the graves of forgotten chiefs" ²⁾.

Sacred Plants. Of the cycas palm SPEISER says that "it is a religious symbol used in all ceremonial activities", and "indispensable for amulets" ³⁾. They also believe that the cycas palm can change itself into a human being ⁴⁾. This SPEISER takes to be an expression of its connection with animism, which is also confirmed by the fact that cycas palms are planted upon graves ⁵⁾. As well as a tally to count the days of the death feasts for a "chief" the cycas (mele) is also used as a tally to count the days after which a bridegroom has to present pigs for the bride ⁶⁾. The objects used in pronouncing the sea taboo are various plants, cycas leaves, etc. "qui ont rapport aux cochons tués dans une fête" i.e. the ceremonies of the graded society ⁷⁾. It is said of one of the brothers of Barkulkul, Mélésia by name (mele = cycas) (for the importance of this myth which belongs to the cycle of myths of Qat, Tagaro, Ambat, etc. see later) "lui seul possédait un pied de cocotier, lequel avait poussé de lui même dans le fruit d'un pied de cyca" ⁸⁾, information, which, however, is not very clear.

We have very little information with regard to croton. The leaves are worn as decoration at feasts ⁹⁾. Croton leaves are used against a certain malignant snake as well as the white flower of an amaranth with which the snake is struck ¹⁰⁾. A bridegroom puts a dracaena branch ceremonially into the ground, depositing the price of his bride beside it ¹¹⁾. According to a myth, a man once saw a dancing dracaena. He took a few leaves of this dracaena and when going to a feast with them he was followed by several women (used probably in love magic). Then the people of his village used the dracaena in magic ¹²⁾.

Santo: With Santo, we come to an island on which there are several groups varying too greatly in culture and race to be studied together. We shall therefore begin our investigation with the Sakaos of the east coast, proceeding over Big Bay and Cape Cumberland to the west coast, and finally to the east coast.

1) 791 464. 2) 160 48. 3) 790 220. 4) CODRINGTON 160 187; according to a myth a man „voulant faire une fête et n'ayant pas des nattes rouges à offrir avec le cochon immolé" is visited in the night whilst sleeping by a cycas palm from which he receives a great number of mats. TATTEVIN 855 454. 5) SPEISER 789 350. 6) RIVERS 725 I 207. 7) TATTEVIN 855 453. 8) TATTEVIN 856 1002 f. 9) SPEISER 789 402. 10) COOMBE 170 15; CODRINGTON, who gives the same information, speaks of a dracaena leaf as the magical object. 160 189 and also SPEISER 789 351. 11) SPEISER 789 295. 12) TATTEVIN 856 504-506.

The Sakaos, who are very tall, and very dark typical Melaneseans¹⁾ differ from the neighbouring tribes of the island as regard race, their more primitive culture, their language and their mythology²⁾.

The Suqe in its typical form with gamal, the separation of fires, the ascension to higher ranks by the killing of pigs, is found also with the Sakaos. Here five ranks exist³⁾.

In the first two grades, the candidate builds a new house and pigs are killed. At the entrance to the grades three and four the house building and feasting takes place as before, the only difference being that the candidate also makes a small garden in which he plants croton and kava. Each man thereupon takes a branch of croton, and one man leads the pig to the new house. The candidate then kills the pig with a large black stone. The bodies of the pigs that have been killed are covered with croton leaves. At entrance to rank five, trees are erected upside-down the roots being roughly formed into a cruciform shape. One is set up for every man who has contributed a pig to the candidate. The trees are decorated with rude drawings of fishes, stars, the moon, etc. A small sacred house is built and surrounded by a fence of cycas palm leaf, which is a taboo sign. The candidate now puts a number of pigs inside this house and closes the door symbolically by setting up a cycas leaf in front of it. He then enters the enclosure. A "chief" i.e. a man of the highest rank, has the power of laying a taboo on anything by putting a cycas leaf upon it. Only a chief may enter the circle of cycas leaves which is set up at the entrance to the three highest grades and inside which the pigs are killed. Another distinctive feature of chieftainship is that crotons are planted only beside a chief's house⁴⁾. SPEISER gives the following description of a "sing-sing" of Hog Harbour: "About sixty pigs were tied to poles in front of the gamal, and the chief took an old gun-barrel and smashed their heads" ⁵⁾.

Whereas SPEISER says clearly of the Sakaos: "Sie haben keine Steinbauten oder Steinmonumente" ⁶⁾, FESTETICS DE TOLNA says of a village near Port Olry ⁷⁾: "Mes matelots et moi, nous grimpâmes sur de petits murs qui entouraient les maisons... Les murs sont bâtis en pierres simplement posées les unes sur les autres."

Sacred Plants. With regard to the sacred plants, of which we have seen the importance, it may be added that at the death of a "chief" a cycas leaf is stuck upright in the ground over the grave ⁸⁾.

Each rank of the Suqe has as badge its own distinct variety of croton

1) SPEISER 789 58, 790 75, 793 72, 791 462, WATSON 919 79, 920 149, DEACON 185 462, etc. etc. 2) SPEISER 789 90, 791 462, 797 150, 793 73, BAKER 37 280, 39 47 f, HARRISON 343 257. 3) SPEISER 789 110, 790 77, 116 f, 132, BAKER 37 289 f, 38 307, 41 114 f, 39 22, DEACON 185 463, 466, 471, etc. etc. 4) DEACON 185 466-469, BAKER 37 290, 41 116, 39 29; the trees with drawings of sun and moon are mentioned in Northern Santo also by SPEISER 789 360 Pl. 95 fig. 13, 14, Pl. 107 fig. 4. 5) 792 132. 6) 793 72. 7) 234 245. 8) DEACON 185 463.

the leaves of which are worn in the belt. The highest castes wear the darkest, almost black varieties. These croton bushes are planted along the sides of the gamals, so as to furnish the men's ornaments¹⁾. In discussing East and Central Santo, SPEISER mentions croton leaves as badges of the ranks of the Suqe²⁾.

Big Bay is inhabited by a strongly mixed population, in which elements of the tall, dark Sakaos, of small bodied tribes and Polynesian elements are found; further to the north, in the region of Cape Cumberland, are people of the type of the Banks Islands³⁾.

This mixture is of interest to us from the point of view of possession or absence of the Suqe and everything connected with it, since from this we are able to determine to which group of the people the Suqe originally belongs.

The gamal is found in the interior of the island, south-east of the Jordan Valley⁴⁾. Describing such a gamal SPEISER says: "Abreast of the house-front there is a line of about twenty posts, such as I had already seen at Hog Harbour, the remains of a feast celebrated some time ago"⁵⁾. SPEISER further mentions two "chiefs" who, "as a sign of their dignity, wore large armlets and very dark coloured croton leaves"⁶⁾. Thus, we find here all the elements we have learned to be characteristic of the Suqe.

The short people near *Talamacco* who are mixed to some extent with the tall, dark Sakaos⁷⁾, have not the Suqe, nor do they separate the sexes, men and women living together⁸⁾.

SPEISER has found in *Talamacco* phallus-like stones⁹⁾. These stones are from 34 to 68 cm. long, and according to information gathered from the natives, they were used in a ritual with kava. It was said that from each kava bowl a few drops were poured into the little depression of the stones, which were set upright in the earth. They do not seem to have been used for some time past. Particularly phallus-like is the stone represented in Pl. 27 fig. 9. The lower, thick, part was buried in the earth, and at the point there is a flat bowl-like depression. The "glans" is divided into numerous squares by vertical and horizontal grooves. Less naturalistic is the phallus on Pl. 27 fig. 10, since the bowl-like depression of the upper part is bigger. A very rudimentary form is represented on Pl. 27 fig. 11. Here the glans is not indicated at all, but the bowl-like depression is still visible¹⁰⁾.

I think we have every reason to believe that these stones are phallic monoliths, such as those which we shall find later in the Nimangki ritual of Senieng (Malekula), and from the fact that such a phallic stone in Nogugu was set up vertically in the ground beneath a dolmen as a kind of supporting stone, we may conclude that these phallic stones belong to

1) SPEISER 789 109, 790 76, 792 112, BAKER 37 288, 39 11. 2) 789 304. 3) SPEISER 789 58, 790 109 f, 791 462. 4) SPEISER 792 142, 790 113, 114, 116, 119. 5) SPEISER 790 113. 6) 790 114, 792 143. 7) SPEISER 792 137 f, 165, 167. 8) SPEISER 792 163-165. 9) 789 Pl. 27 fig. 9-12. 10) SPEISER 789 162.

the stone-using immigrants. The Suqe which no longer exists in the region of Talamacco, probably died out after the culture of the stone-using immigrants had left its traces here.

SPEISER gives the following description of a "sing-sing" at Tawuds, north of Talamacco on the west coast of Big Bay, where we again find typical club houses and the Suqe¹). The real ceremonies began with the killing of about two hundred young female pigs. The host mounted a stone table on which he danced and on which he killed the pigs. For every ten pigs one lobe was torn off a cycas leaf²). Then poles were driven into the ground to which the tusked pigs were tied. The host took up his position on the stone table and, armed with a special club, broke the pigs' heads³). Of the stone tables BOURGE says⁴): "Pour quelques-uns les dimensions de la pierre sont 5 pouces de long sur 3 de large et 1 d'épaisseur. Elle repose sur quatre forts pilliers d'environ 1 pied de haut". These stone tables upon which pigs are killed during the ascension rites of the Suqe, are to be found on the dancing ground of the village. Since the candidate also dances upon them, SPEISER has called them "Tanzaltäre"⁵).

In the inland village *Wunapenini* "there is a bare earth patch in the village on which is a stone table and certain woods connected with pig-killing rites"⁶). We are here in the presence of transitional conditions, the inland people not having quite absorbed the Suqe system of the coastal people. This is evident from the following description of the Wunapenini people: Although the coastal natives have a strict male-lodge system, the Wunapenini area has no club houses, both sexes sharing equally in all dwellings. There is, one "fire" exclusively for men, but another at which men may share with their women and children at meals. The men's fire group looks down on the men at the mixed fire, and the latter cannot drink kava nor share in any pigs killed by the former⁷).

In *Pikamai village* on the coast not far from Wora Point, the Suqe has 11 ranks, of which "Moli" is the highest. The sexes are kept rigorously separate, men's houses and women's houses existing, as well as the separation of fires. HARRISON thinks that this system has spread northwards up the west coast from Malo⁸).

In *Takamunu*, north of Wora, there are on the dancing ground of the village and near the club house a number of stone tables about two feet high and of a similar breadth. These are slabs of coral supported by stone slabs dug into the ground, the whole having the form of a little dolmen. When killing the sacrificial pigs, the host dances upon the table⁹).

1) 789 98, 790 141. 2) The use of cycas palm leaves, for ritual counting of the sacrificial pigs, is also mentioned from North and East Santo by SPEISER 789 350, 411, who adds that for ordinary counting little stakes are used. 3) SPEISER 792 174-177; a similar description is given by BOURGE 88 183-187 for "Santo". 4) 88 184 f. 5) 789 98, 385, 411. 6) HARRISON 343 248. 7) HARRISON 343 248. 8) 343 251. 9) SPEISER 789 101, 385 Pl. 14 fig. 3, 790 fig. 36.

At *Cape Cumberland* and in the north-west of Santo the people are light-skinned and are found as far as Wus in the south ¹⁾. SPEISER supposes the existence of relations with the Banks Islands ²⁾, an opinion which is confirmed by the fact that on the north-west coast there is also a village called Venua Lava. It is evident from the name, the racial type and culture that this is a colony of the Banks Islands people ³⁾. SPEISER thinks that these immigrants migrated along the west coast of Santo as far as Aore and Malo Island, where, however, they have almost died out to-day ⁴⁾. In this connection it is important to note that according to the opinion of the people of the Nogugu District, south of Cape Cumberland, the ghosts go to Cape Cumberland ⁵⁾.

When discussing the short people, we shall see to what extent these immigrants influenced the local culture.

Several writers have recorded the existence of enormous stone-work at Cape Cumberland on the northern point of Santo. ECKARDT, for instance, records: "Near Cape Cumberland one is surprised to find the ruins of enormous monuments extending over a considerable area; pillars of regular form hewn out of huge blocks of stone, parts of a wall... and all this extending over a surface of almost three miles. Similar mysterious remains are also found in the north-east of the island, about five miles distant from the Cape near a village. The natives speak of these remains with religious awe. They are taboo for them, and according to their tradition, were erected by white people long ago" ⁶⁾. But SPEISER, during a sojourn of three weeks in the island could find nothing there, and he is of opinion that it is simply a legend, or that the remains were the ruins of a village of which all traces have disappeared ⁷⁾. But if this information is based upon facts, as I am inclined to think it is, the belief expressed by the natives that the stone-work was constructed by white people is as we shall see later of the utmost importance.

Sacred Plants: We have very little information respecting the use of sacred plants in this area. With regard to Big Bay, we are told that croton and dracaena are planted round the houses for decorative purposes. In North Santo, in magic for the succesful trading of pigs, "Zauberblätter der Cycaspalme" are used ⁸⁾.

The short, pygmoid people are found mostly in the mountainous parts of *West Santo* ⁹⁾. SPEISER, who, as already mentioned, considered them as an independent race ¹⁰⁾, has subsequently seen in them an inland variety of the Melanesians of the coast ¹¹⁾.

Apart from a number of cultural elements which are found especially

1) DEACON 185 462, 184 703. 2) 790 150. 3) SPEISER 789 57. 4) 790 150.
5) DEACON 185 472, CAPELL 121 53. 6) 209 57; see also BOURGE 88 148, MEINECKE
555 329. 7) 789 95. 8) SPEISER 789 111, 348. 9) SPEISER 790 129, 131, 793 59.
10) 790 125 f, 132, 793 56. 11) 789 58, 63 f, 794 259.

amongst these short people¹⁾ of which feathered arrows are one of the most conspicuous, their culture strongly resembles that of the Melanesians of the coast²⁾. In fact, the short people are continuously in contact with the Melanesians of the coast who very frequently marry women of the short people. Moreover, dispersed elements of the coastal Melanesians were numerous in the interior, so that in none of the inland villages did SPEISER find more than 70% of short people³⁾.

The Suqe, which has penetrated to this region but recently, has hardly obtained a footing here⁴⁾. Club houses, the separation of the sexes and of fires, are not known here, and it is also remarkable that the kava is unknown—a subject which will be discussed later⁵⁾. It is interesting to note, however, as SPEISER informs us, that the houses "owing to the uneven character of the ground" are mostly built upon stone foundations composed of stone blocks loosely heaped one upon the other, approximately to the height of a man⁶⁾.

Having in mind the cultural and racial influence of the Banks Islands on North-west Santo⁷⁾ SPEISER is in all probability right in considering these stone foundations of the houses as "almost certainly the consequence of colonisation from Venua Lava"⁸⁾, since we have found house foundations in the Banks Islands on Venua Lava, Ureparapara, Mota, Gaua and Meralava⁹⁾. In this connection the following information regarding North-west Santo is not without interest. In the mountains, near the region of the short people, the floor of the men's houses has often to be levelled; for this purpose strong posts are driven into the ground and the space thus enclosed is filled in with earth¹⁰⁾.

In the Nogugu District on the west coast of the island, we again find a highly developed Suqe. From one of his informants DEACON obtained the names of 9 ranks, but from another he got 17 ranks. There is nevertheless a certain correlation between the two lists¹¹⁾. Furthermore this difference in the number of grades is probably due to the fact that both informants counted in a different manner the sub-grades into which some of the grades are divided. A certain number of the grade names are identical to some of those we have found on other islands. A table stone called sua (this is not the ordinary word for stone) is set up on four or six vertical supporting stones, called kerin sua. In the lower grades it is the father who erects these stone platforms; in the higher grades the man making the rise in ranks does this, or pays someone else to do it for him. According to the informant

1) SPEISER 793 58. 2) SPEISER 789 221, 790 131. 3) 790 134. 4) SPEISER 789 297, 791 463. 5) SPEISER 790 131, 793 39, HARRISON 343 249. 6) 789 113, Pl. 13 fig. 4, 790 131; "House upon stone foundation" is also mentioned by MILKE 575 18, probably based on SPEISER. 7) SPEISER 793 73. 8) 793 75. 9) It is, however, remarkable that the coastal tribes in this region have no house foundations. 10) SPEISER 789 113 Pl. 12 fig. 1, Pl. 13 fig. 1. 11) DEACON 185 472-474.

who gave the names of 9 ranks, around the stone certain trees are planted, which vary according to the grade which is being entered. For grades up to and including rank five, only "mele" (cycas) trees are set up; for rank seven, "mele" and "pras" trees (not identified); while for entrance into rank eight and "Moli", the highest rank, cycas, orange (moli), coconut and pras trees are planted. The man making the rise in rank then stands on the stone table and kills the pigs on the stone table. Kava is then drunk. Men of the highest ranks or "chiefs" have the right to lay a taboo on coconuts by tying to a tree a frond of cycas fastened to a branch of the yellow hibiscus tiliaceus. A chief declares his rank by setting up round his house stones about 1½ feet high, and planting patia trees about it ¹⁾.

SKINNER has published some photographs of these stone tables, sua, from Nogugu ²⁾. The horizontal slab of one of them (fig. 2) is 7 feet 2 inches in length, and 2 feet 6 inches in width, and the top is a little less than 2 feet above the ground. Another (fig. 3) is 31 inches long, 27 inches wide, and 19 inches high; a third dolmen measures 51 inches by 30 inches, and its horizontal surface is 27 inches above the ground. These stone tables were situated on the old dancing ground. A phallic stone, very similar to those SPEISER has found near Talamacco, was set vertically in the ground beneath the one of the stone tables. (fig. 3, see also fig. 4).

In Tasman District, south of Nogugu, on the west coast, the graded society is called "Mol", possessing all the characteristic features of the Suge. DEACON was informed of the existence of 6 ranks. At the entrance to the first rank, a small "tower" or platform of stones is constructed, measuring about 4 feet across and 3 feet high. In a circle round this stone platform red crotons (pau) are planted, an opening being left at one place so that the circle can be entered. On the top of the platform a hole is left in the stones, and into this a cycas tree (mwel) is inserted. The candidate ascends this stone platform, and, standing beneath the cycas tree, kills the pig. The entrance to this grade is unique, for in no other in this district is there any stone-work or planting of trees. At entrance to rank two a row of 100 sticks is set up on the dancing ground and cycas fronds are bound round each. One hundred pigs are then brought, and one is fastened to every stick. Entry into rank four contains a peculiar variation of the general tying of pigs to sticks of wood. A long wooden pole is set up on the dancing ground. To this 30 ropes are fastened at equal intervals along its length in such a way that the free ends lie in a straight line leading away from the pole, that of the lowest rope being nearest the pole, while that of the top rope is farthest away. To the free end of each of these ropes ten pigs are fastened and these are then killed. At entrance to rank five two rows each containing 200 sticks are set up, so that 400 pigs are killed in all. At entrance to rank six, the highest grade, four rows of sticks are set up

1) DEACON 185 472-474. 2) 783 234, 235, 237, fig. 1, 2, 3.



Pig-Killing platform at Nogugu, Espiritu Santo
(After SKINNER 783 235).



Dolmen at Nogugu, Espiritu Santo, New Hebrides
(After SKINNER 783 235).



125 sticks in each row and 500 pigs are killed. Here, as in other parts of Santo, "chiefs", or men of high rank, have the right to lay a taboo on objects by attaching cycas fronds to them. Each grade has its distinctive ornaments which are worn. A man of rank four has thrust in his belt two bunches of croton leaves ¹⁾).

Regarding burial DEACON says: "If the deceased was a member of the Mol, red hibiscus bushes are planted over the grave and small stones are erected round it, but for others these are omitted" ²⁾. SPEISER gives still more detailed information. He says: "At the death of a man of high Suqe rank, his grave, near the men's house, was surrounded by a low ring of stones. At one side a cycas palm was planted, and on the other a variety of croton corresponding to the rank of the dead. The insignia of his rank were laid upon the stone table upon which he had danced when sacrificing pigs, and croton bushes corresponding to his rank are planted beside it" ³⁾).

Apart from the information mentioned above about Nogugu, that a "chief" may set up stones around his house, meaning probably monoliths and not a stone wall, I am not aware of any stone walls around houses or around villages. But J. WILLIAMS records the following ⁴⁾: "During my last voyage I spent a considerable time on the west coast of the island (Santo), and visited several villages, also penetrating a few miles into the bush... About three miles from the beach, I suddenly came to a small clearing, with a few small huts inside a low stone fence." But this information is not confirmed by any other writer.

Finally, we must mention the information given by HARRISSON ⁵⁾ stating that the village of Sulemolimoli at the head of the Vera Valley, not far from Santo Peak "takes its name from a single sacred monolith, the stone of the great chief". Apart from the stones of Nogugu mentioned before and the stone pillars of Cape Cumberland, this, as far as I am aware, is the only information about monoliths in Santo. These statements, however, need to be clarified. The name "Sulemolimoli" certainly suggests connection with the rank "Moli" which, in many of the graded societies of the Suqe, is one of the highest, or more often still, the highest rank ⁶⁾. Furthermore, the rank "Moli" is found in many other islands of the New Hebrides, for example, in Pentecost, Aoba, etc. Therefore a monolith as "the stone of the great chief" would be quite understandable.

In *Tismulum*, S. W. Santo, the grade system is called "Mele", "Cycas". For the three highest grades (grade 4, 5, and 6) the ritual involves, among other things, the erection of a stone table. For rank four one puts up a stone table (*sua*) on which to kill pigs. This table consists of a stone slab (*sua*), 2½ feet to 3 feet across, resting upon two upright slabs (*kerin sua*)

1) DEACON 185 475-479, fig. 2. 2) 185 479. 3) 789 305 Pl. 14 fig. 3. 4) 955 7. 5) 343 255. 6) Cf. Nogugu District: "Moli", *Tismulum* District: "Moli", DEACON 185 472 ff, 489 ff; Pikomai village: "Moli", HARRISSON 343 251; S. E. Santo: "Mol", BAKER 41 117.

of about 3 feet high. Steps lead up to the top of this table. Round the stone table is planted an inner circle of a kind of cane called *arai*, and an outer circle of a *dracaena* called *tsii*. To the stems of these trees *cycas* fronds and *hibiscus* (*vae*) are fastened. At some place on the circumference an opening is left for entering and the enclosure is entered only by those men who are already members of the rank. All the other people must remain outside. It is for this reason that the *cycas* fronds and *vae* branches are fixed to the outer side of the *tsii* trees; they are symbols of taboo. In the ceremonies of rank five, the outer circle consists of *tsii* trees as before. A man of rank five or rank six has the right to place a taboo upon anything by fixing to it a *cycas* frond and a *vae*-tree branch. *Cycas* leaves worn by the members are the distinctive ornaments of rank two, three and four¹⁾.

DEACON gives the following information of offerings to the sky-being Tautai, whom we shall discuss later: When there was no wind, a man would go and build up a heap of stones, some 4 to 5 feet high and put earth on top to make it level. He would then take a young pig and kill and burn it, so that the smoke might rise to the sky to Tautai²⁾. CAPELL also mentions these offerings to Tautai "at altars of heaped up stones (which reappear on Vao)"³⁾. This is all the information I have, in so far as Santo and Vao Islands are concerned, with regard to the existence of stone altars other than of dolmen-like form.

Whereas the Meri and Antayii inland tribes of the south know neither the *Suge* nor the *gamal*⁴⁾ "Lodges transitional from Sakau (which region they adjoin) gradually towards the type on Malo Island"⁵⁾ are again found in the Kolendrola District, north-west of the Meri; and in the south-east of Santo the *Suge* is strongly developed. Some of the 8 rank names which BAKER records resemble those of Tismulun⁶⁾.

Aore: We now come to the adjoining islands of Southern Santo. On Aore, particularly on the south coast of the island, SPEISER has found groups of tumuli of sand and humus from 20 inches to a height of 3 feet even⁷⁾. Fragments of shells showing distinctly that they had been broken, were found everywhere in the tumuli. Mixed up with these shells were small stones which SPEISER considers to be cooking stones. Furthermore, fragments of stone tables were found in these tumuli. SPEISER admits that he can give no explanation of the real nature of these tumuli, but asserts that they are not graves, and continues by saying: "I suppose that we are confronted with old villages where the houses were built upon more or less elevated foundations, as in the Banks Islands, except that the foundations of Aore were not surrounded by stone walls." An attempt is

1) DEACON 185 489-494. 2) DEACON 185 488. 3) 121 54. 4) HARRISSON 343 252. 5) HARRISSON 343 253. 6) Cf. BAKER 41 117 and DEACON 185 489-494. 7) 789 Pl. 96 fig. 7.

made by SPEISER to explain the presence of the fragments of shell in the tumuli; he assumes "that, during its construction, the natives occasionally ate some sea animals, the shells of which remained here." "However", he adds, "it is impossible to understand how it comes about that the ovens were in the middle of the tumuli" ¹⁾. Elsewhere ²⁾, in support of the supposed relation to the Banks Islands, SPEISER invokes the light skin of the former Aore people, which corresponds to the light skin of the present-day Banks Islands people. The following objection must be raised to SPEISER's explanation. We have not the slightest proof that the stones found mixed with shells in the tumuli were cooking stones, since they were not arranged in any definite form but were found to be dispersed haphazardly in the tumuli. It is therefore more likely that these stones were intended to prevent the mounds from crumbling away. SPEISER declares that the tumuli are not graves, probably because he did not find any bones in the stone tables. He says nothing, however, to explain the presence of the stone tables in these mounds. In this connection attention must be drawn to the fact that, according to the myths of Mewun in Malekula which will be discussed later, Kabat was buried in a dolmen "covered with a mound of earth and small stones, which can be seen to-day in the logho (the sacred place) of Melpmes", and opposite the tabooed area of the logho, where the sons of Kabat were buried in the same manner, there was a "mound of trochus shells" ³⁾. Unfortunately, DEACON did not undertake excavations in this mound of shells, so that we do not know what it contains. It is certain, however, that there is as little justification for considering the "small stones" of this tumulus as "cooking stones" as there is for considering the stones of the Aore tumulus as such. DEACON's information regarding the position of the tumulus-like grave of Kabat in Mewun is not quite clear. From the analysis of DEACON's notes, WEDGWOOD concludes that most probably the grave was "somewhere in the vicinity of the logho" ⁴⁾. Should it eventually be found that the mound of trochus shells was manifestly Kabat's grave—purely a supposition of course—the identity between Aore and Mewun would practically be established: a dolmen, covered by a tumulus consisting of earth and stones and shells. The fact remains, however, that SPEISER did not find any bones in the dolmen. Only further investigation on the spot could clear up this point.

On the other hand, let us see what reasons there are for considering, as SPEISER has done, the Aore mounds as house foundations. It has already been mentioned that besides the house foundations in the Banks Islands and West Santo very big house foundations do occur on Maevo, Aoba and Pentecost; in Aoba two houses, in Pentecost two or three houses, and in Maevo two to four houses were built upon a single foundation. It is furthermore significant that on Aoba these house foun-

1) SPEISER 789 911, 113. 2) 789 250. 3) DEACON 184 631. 4) In DEACON 184 653.

dations occur in the south-west of the island, and on Maevo especially in the south; for, from the few indications we have regarding the migrations of the stone-using immigrants in this area, it follows that from Malo they went via Aoba to Maevo. Now, such a migration is most likely to have touched particularly South-west Aoba and South Maevo. This migration is furthermore borne out by the fact that light-skinned elements are actually to be found on Aoba, Maevo and Pentecost¹⁾. JOLY²⁾ has recorded the presence of very light-skinned elements on South-east Santo, i.e. the region directly opposite Aore. There is nothing to contradict the opinion that this light coloured skin, upon which SPEISER based his opinion that there was a migration to this region from the Banks Islands, is actually due, or at least partly so, to the influence of the stone-using immigrants. If there are thus good grounds for considering the Aore mounds as house foundations, is it not quite inconceivable that a house should have been built upon stone tables? Furthermore, are the grounds for the opinion that the Aore mounds are house foundations stronger than those in support of the view that these mounds are graves? I do not think this to be the case. Now, if the former arguments are equally as good as the latter, would it not be permissible to conclude that the Aore mounds were both graves and house foundations? That such a view is not paradoxal will be learned in our study of Fiji where the similarity between graves and house mounds is not only an exterior one, but where there are actually many tribes which bury their dead under the floor of their dwelling houses or temples, i.e. in the stone foundations of these houses, so that we are probably entitled to conclude a genetic connection between house foundations and graves. Now, in some of the New Hebrides it is also customary to bury the dead in the houses. In these circumstances, SPEISER's view that the Aore mounds are traceable to the Banks Islands can be accepted, and at the same time a genetic connection of these mounds with the tumulus grave of the Kabat of Mewun can be maintained. If this is right, it follows that the stone-using immigrants came to the Central New Hebrides from the Banks Islands.

Malo: The culture and race of Malo are strongly influenced by the neighbouring islands. Thus the inhabitants of North Malo racially and culturally resemble those of South Santo, and the inhabitants of South-east Malo more closely resemble those of Malekula³⁾. The language is Melanesian in type, but contains many words similar to Polynesian⁴⁾.

The Suqe and the gamal are also found here⁵⁾. We have, however, very little detailed information about the Suqe. GUNN⁶⁾ speaks of 11 ranks,

1) Loc. cit. Regarding Pentecost see SPEISER 789 61, 791 464. 2) 419 368.
3) SPEISER 789 59, 790 209, 249, 792 253, HARRISON 343 258 f. 4) RAY 705 47,
CAPELL 121 59, GUNN 313 229, SPEISER 789 90. 5) SPEISER 789 384, 790 129, HARRISON 343 258 f. 6) 313 203, quoted also by SPEISER 789 318.

and DEACON mentions the rank "Moli"¹⁾. Many pig-killing tables were found among the very extensive stone-work of Malo²⁾. They are called *vota* which, according to LAYARD, corresponds to the Atchin word *na-wot*, meaning a dolmen³⁾.

Besides this, there are very considerable architectural ruins on the island e.g. stone walls and tumuli⁴⁾. With regard to the latter, SPEISER expresses an opinion similar to that which he expressed in regard to the tumuli of Aore, namely, that "In the New Hebrides I have found such big monuments only in the neighbouring Aore, and very similar constructions on the Banks Islands, so that the supposition that the inhabitants of Malo and Aore, as well as those of the south coast of Santo, are connected with those of the Banks Islands, is borne out to a great extent"⁵⁾.

Sacred Plants. Very little information is forthcoming regarding the use of sacred plants, since few details are known about the ritual of the Suqe. Here too cycas leaves are used as badges of the high Suqe ranks and in magic for pigs. In magic for fertility made in the garden of a "chief", water from a coconut is poured by the magician upon cycas leaves which are afterwards tied to the supporting stakes of the yams, by the "chief" himself⁶⁾. HARRISSON mentions "beautifully cultivated croton and hibiscus" in the villages⁷⁾ but does not state their ceremonial use.

Malekula: As explained in the introduction, we have begun our investigation in the New Hebrides because the information we possess about this area is more complete, and the study of these islands can give us a groundwork in studying those regions of which our knowledge is less detailed. On the other hand there is no island in the New Hebrides about which we have such excellent information as Malekula, and we shall devote a longer time to the study of this island. The information dealing with the problem of megaliths is so rich here, that it is no exaggeration to consider Malekula as the best known place in Melanesia as regards megaliths, comparable only to San Christoval and Malaita on which FOX and IVENS have given us excellent information. We are indebted to DEACON and LAYARD for the very complete records which we possess about Malekula, where these two students paid particular attention to the problem of megaliths; on the other hand, the megalithic culture of Malekula is exceedingly rich. As we have considerable information at our disposal we shall proceed in geographical succession beginning with the south coast of the island.

Racially, at least three different types can be distinguished: a taller people in the south, identical to the people of South Santo and Malo; a northern group, most closely related to Central Santo; and a short type living in the southern inland region and among the taller people of the north. The

1) 185 495. 2) HARRISSON 343 258 f, SPEISER 790 209 f, 792 230, DEACON 185 495.
3) LAYARD 468 202 Note Z. 4) SPEISER 789 384 f, 790 209 f, 792 230. 5) 789 384, 790 210, 792 230. 6) SPEISER 789 348, 402, from DONIAU 200. 7) 343 258.

Big Nambas people are clearly Melanesian in type with very dark skin, strongly developed superciliary arches, and curly hair, but there are also semitic features and a pygmoid strain amongst them. Besides these, there are a few elements recalling the Polynesian type, with straight hair but dark complexion ¹).

The graded societies are very strongly developed in Malekula having all the typical characteristics, as progression in ranks, pig-killing rites, club houses, separation of fires, etc.

SPEISER gives the following information about South Malekula without, however, specifying the exact locality: In South Malekula, where the amil is often some distance from the village, the dancing grounds are usually in close proximity to it. In the centre of the dancing ground there are a number of upright drums around which cycas palms and croton bushes are planted. At the periphery of the place there are stone tables and graves. The man who kills the pigs dances on the stone tables which are made of four coral slabs inclined slightly towards one another and supporting a fifth slab placed horizontally. The stone tables are of different size but most are of a height of about three feet ²).

When a man belonging to a middle rank of the Suqe dies, his skull is buried at the periphery of the dancing ground. The grave is enclosed by a stone wall formed by setting up vertical coral slabs. In the space thus enclosed wooden images are set up their number being determined by the Suqe rank to which the dead man belonged. Upon the grave a croton bush is planted ³). It is only for men of very high Suqe rank that the well known statues with modelled skull are made ⁴). With regard to the other bones, LEGGATT says that they are buried beneath stones, but does not give any details about this mode of burial ⁵).

DOUCERÉ mentions „les entourages en pierres sèches bien assemblées autour de la case particulière des chefs du plus haut grade dans le Sud de Mallicolo" ⁶) and v. d. BROEK D'OBRENAN saw in Milip Village in the western part of the south coast "un mur de pierres sèches entourant un carré de brousse dont le sol a été profondément fouillé par d'énormes cochons noirs, enfermés dans cet enclos" and furthermore "un second mur plus élevé, derrière lequel nous apercevons une grande place entourée de maisons basses" ⁷). But SPEISER says that the villages of South Malekula were mostly surrounded by fences; "I have never seen stone walls", he says ⁸).

Speaking generally of Malekula, SPEISER says ⁹) that the gardens are often surrounded by stone walls instead of fences.

1) SPEISER 789 59, 790 45, 205, HARRISON 342 97 f, 105 f, CHEESMAN 138 218, 220, LAYARD 468 141 Note 1. 2) SPEISER 789 385 f, Pl. 80 fig. 4, 790 fig. 59 to face p. 208; in 792 to face p. 31 SPEISER shows the same stone table with the indication "near Port Sandwich". 3) SPEISER 789 306 Pl. 86 fig. 4, 790 fig. 60 and text to fig. 60. 4) SPEISER 789 307. 5) LEGGATT 483, quoted by SPEISER 789 384. 6) DOUCERÉ 201 8. 7) v. d. BROEK D'OBRENAN 98 96. 8) 789 114. 9) 789 146.

In Worvulu village, near the Metanui River on the south coast of Malekula east of Seniang, the graded society "Nimangki" has 17 grades. Rank 16, called "Nevat" i.e. "stone", is divided into a number of subgrades. On entering the first grade the candidate sets up one monolith near the gongs; when he enters the second another stone is erected; for the third grade a third stone is planted in a line with the first two, and so it continues, a fresh stone being added at each Nevat ceremony ¹).

Unfortunately we have no further information about the ritual of this secret society, but since its name and the majority of the grade names mentioned are identical to those of Seniang ²) in many of which the erection of stone-work is usual, it is probable that on the south coast too the erection of stone-work was much more frequent.

In Seniang District on the southern part of the west coast of Malekula we again come across the "Nimangki" with all its typical characteristics. DEACON and LAYARD have given us excellent descriptions of this society ³). Whereas LAYARD mentions 27 ranks, DEACON's list contains 32. Many of the names of both lists are identical, as is also the ceremonial connected with them, according to both these authors. In the succession of ranks, however, there are frequent divergencies in both lists. The grade numbers used by LAYARD will be quoted in the following ⁴).

In the Seniang District, both stone platform and dolmen are absent, a central feature of the rites being the erection of stone circles and the planting of certain trees. In the lower degrees wooden images or uncarved poles are erected. As the degrees advance this is combined with the planting of trees, until in the higher degrees, particularly those which take the title of Mbalias corresponding to Mal in the Small Islands—i.e. upwards from grade 14, according to LAYARD, and grade 20 according to DEACON—the place of the wooden image is taken by a monolith. This is at first plain ⁵), then grooved, with a vertical groove up each side and over the top ⁶), and in the highest degrees of all it is carved to represent several human faces or the whole of the human figure ⁷). Besides the trees, a large number of smaller shrubs are planted throughout the course of the rites. In the higher and what LAYARD has called "stone-using" degrees, the central

1) DEACON 184 374 f. 2) Cf. the list of the Nimangki grades of Worvulu: DEACON 184 374, with that of Seniang: DEACON 184 274 f. 3) LAYARD calls it 'Menggi', "ni" being the article. LAYARD 468 146. 4) The following data are mostly compiled from the descriptions provided by LAYARD 468 145-203 and DEACON 184 270 ff, 359, 469, etc. As the details which we give are widely dispersed over the whole of these texts, for the sake of continuity we shall not always quote the reference page. For particulars regarding the erection of stone-work in the grades 7, 9, 12, 14, 16, 23, 25, see the following photos published by LAYARD 468 Pl. XIV fig. 3, 4, Pl. XV fig. 3, 4, Pl. XVI fig. 3, 4, Pl. XVII fig. 1, 2. See also DOUCERÉ 201 28. 5) In the grades: 7, 14, 16, 18, 19, 22, 23, 24, and in DEACON's grade 9 (DEACON 184 323; not mentioned by LAYARD); regarding grade 24 see DEACON 184 336. 6) In rank 20 and 21. 7) In the grades: 9, 23, 24, 25, 27.

object, whether tree, wooden image or monolith, is surrounded by a stone circle "nonggob" ¹⁾. In the lower degrees the place of the stone circle is taken by a rope supported on four stakes. In the case of the purchase of a new pig's tusk worn as a bracelet and bought during one of the degrees in which the central object is enclosed by a stone circle, the front stone of the circle is styled a phallus. The man who performs the rite and to whom a small round pebble is given with the new bracelet, drags the novice to this phallic stone, and placing his wrist or elbow on the top of it, cracks with the pebble the bracelet belonging to his last degree, and replaces it with the new one. He then lays the pebble on the top of the phallic stone, where it remains, and is called the "stone's child".

Another distinction between high and low grades, here, as in most of the other islands of the New Hebrides, is shown by the place on the dancing ground where the images are erected. The nearer the club house the more sacred does the space become, the back of the club house being the most sacred place of all. In accordance with this, the images set up at entrance to the lower Nimangki grades are planted at a greater distance from, and those of higher grades, nearer to the club house, while for the highest grade of all, Neru Wenoung, a stone carved with many faces and bodies is erected some distance behind the club house.

There are two main varieties of wooden images (*temes*). One is made of hard wood, the other of a tree-fern. The monoliths erected are roughly hewn blocks of oval section with a flat top from 3-5 feet high. In the case of the higher post-Mbalias degrees, where the stone is carved with the human form or faces, the working is much smoother. An exception to this description is the diminutive tapering monolith with incised face of degree 9. The stone circles (*nonggob*) are made up of small stones usually not more than a foot high, but in the case of a circle surrounding an image or monolith carved with the human form, the front stone is invariably larger than the rest and represents a phallus ²⁾. Stone circles surrounding a tree have no phallic stone. Every one of these phallic stones has a small round pebble resting on top of it, the "stone's child" (*newutun ne-wet*) already mentioned.

A few of the stone-using degrees will now be discussed in more detail so far as is necessary for our purposes. To avoid unnecessary repetition a description of all the stone-using degrees is not given here, but simply a resumé of the most characteristic features.

In rank 7 we come across the erratic appearance of the stone circle otherwise reserved for the higher degrees from rank 12 (called *nimweil*) upwards. With regard to this rank LAYARD says ³⁾ "On examining my

1) In the grades 7, 12, 13, 14, 15, 18, 23; from rank 12 upwards the titles correspond to those of the Small Islands. 2) In the grades: 7, 13, 14, 15, 18, 23. 3) 468 162.

photographs, I find one about which I can find no notes whatever, and which is reproduced on Pl. XIV fig. 4. It represents an oval platform of stones 10 or 12 feet long with a rough monolith at the head. It is labelled "Tanem-weliw" (that is the name of rank 7), but beyond that I can offer no information regarding it." If LAYARD's labelling is correct, this would be the only mention of a stone platform in Seniang, but LAYARD's photo is very indistinct. In any case, the absence of the dolmen or stone table in Seniang would be extraordinary, since they are found in many of the neighbouring regions.

In rank 9 a diminutive monolith (*ne-wet* i.e. "stone") is erected; it is about 2 feet high and is called *no-usun*, "phallus"; it is oval in section and tapers to a blunt point, with a human face incised on one surface. This degree is "erratic", as LAYARD puts it; its monolith is quite unlike all the others and it is the only degree below Mbalias (i.e. rank 14) which possesses one at all, thinks LAYARD. — In the grade Mbalmbal (i.e. grade 10 of LAYARD and grade 14 of DEACON) a wooden pole "*mbalmbal*" meaning "Sacrificial pole" is set up, to which pigs are attached before being sacrificed.

Apart from the degree 7, in which a stone circle is erected, the typical degrees using stone circles begin with rank 12 called "*Nimweil*" i.e. "*Cycas*". In this degree the *cycas*, surrounded by a stone circle, is the central object which gives its name to this degree. LAYARD, who has called the use of stone in the degree 7 "excentric", explains this by the fact that rank 7 as well as rank 11 are so-called "summing-up" degrees in which the images of all the preceding grades are once more erected thus closing a non stone-using order¹).

Rank 14, called Mbalias (or Na-amel Won) is the first degree of the many which take the title of "Mbalias". (*Mbal* corresponds to *Mal*, which is the name of the corresponding degree in all the other parts of this region). LAYARD remarks that his written notes entirely omit any mention of a monolith. But he nevertheless thinks that, apart from the "erratic" degree 9, the monolith appears here for the first time. He bases his opinion upon a photo of a monolith erected in this degree (Pl. XVI fig. 3). On this WEDGWOOD has made the following critical remarks²): "It is curious that Deacon makes no mention of any monolith connected with these rites, and there is reason to imagine, therefore, that in fact none such was set up and that Layard was mistaken. Since, as Deacon points out, several men may be entering different Nimangki grades at the same time, it is not impossible that this stone which Layard photographed really belonged to the rites of a different grade. Now Deacon records that a small stone is erected at entrance to the much lower grade Naamel (i.e. rank 9 of

1) LAYARD 468 197. Regarding "summing-up" degrees see also DEACON 184 317.
2) In DEACON 184 335.

DEACON, not mentioned by LAYARD) and it is just possible that Layard was confused between the two grades Naamel and Naamel Ewon, particularly since he does not record the former at all".

It has been seen that a certain number of the monoliths mentioned are phallic, some having a groove extending up each side and over the top, although, according to LAYARD, "it is by no means clear which of these monoliths, or to what extent any of them are phallic". He thinks that the monoliths of the grades 16, 18, 20, 21, 23, 25 are phallic. In rank 19 a monolith is erected which, according to DEACON, "seems to be not unlike a tomb-stone, and on one of its flat sides there is painted a design... which is said to be a variety of bat".

Of rank 22 LAYARD mentions the erection of a monolith without groove, but DEACON says of this rank that ten stones are set up, these, however, being probably not all temes but rather nousun nevet, i.e. phallic stones. LAYARD gives no detailed description about the grade 24, called "Namu" (DEACON's degree 30). DEACON gives the following very detailed information regarding this rank. He says ¹⁾: "Namu is the highest grade of which we know anything. For this Nimangki, an upright monolith some 5 feet high, is erected to the right of the village amel (club house) and a little in front of it. The stone is carved with a complete human figure; the hands, with each finger distinctly represented, come together near the genitals, which are also clearly portrayed. It is called nevet nambar ("the stone which cannot see") and serves as the front centre post of a small model amel which is built. This is the amel namu... Stretching away in a line in front of the amel namu are planted some 6 or 7 small monoliths of 2 or 3 feet high which are spoken of as nousun nevet ("the penis of the stone") and to each of which a cycas frond is tied... To each of these nousun nevet there is fastened one of the pigs which are to be killed during the ceremonial. This is in accordance with the Nimangki ritual of Lambumbu, whence, it is said, the people of Seniang originally obtained this grade". According to one of DEACON's notes "a second stone, carved in like manner, is set up, in the bush, just behind the club house, the most sacred place in any village, and it may be that this too had a line of nousun nevet. It is possible, however, that in attributing two carved stone images to Namu, the informant was confusing the stone erected for this grade with that of Neru Wenoung (LAYARD's rank 27, DEACON's rank 32) which is set up behind the amel".

Resuming the description of the monoliths of the ranks 14, 16, 18, 19, 20, 21, 22 and 25, i.e. carved, plain, phallic and non-phallic monoliths, LAYARD says ²⁾ "All these monoliths are surmounted by a stone child". Apart from being used to break the old pigs' tusk, in a single instance only—

1) 184 335 f. 2) 468 186.

in the grade 12, was it said that the stone's child was used for killing the pig.

DEACON and LAYARD have endeavoured to establish the chronological sequence of some of the megalithic types, but the fact that these endeavours are based only upon information gathered in respect of Malekula and the Small Islands, should warn us against drawing any definite conclusion. Moreover, we shall see that even the material available regarding Malekula cannot be interpreted with such certitude as DEACON and LAYARD thought. DEACON says of Seniang ¹⁾: "Nevelvel (i.e. DEACON's rank 18 and LAYARD's rank 13) is said to be the last of the grades which are native to Seniang. All those classed above it... in which the upright monolith is prominent have been introduced from Lambumbu. This statement, made by the old men of South West Bay, is borne out by the fact that, for celebrating the rites of these higher grades, an expedition has to be made to Lambumbu to obtain certain objects which are used in the ceremonial, while membership of the grade Namu must actually be purchased from a man of Lambumbu who is of this rank... If further evidence were wanted that these grades are intrusive, it might be pointed out that in Namu a line of monoliths is set up to which cycas fronds are attached, and to which the pigs to be killed are fastened, one to each monolith, in a manner exactly similar to that of the higher grades of the Nimangki in Lambumbu, but unknown in any of the recognized indigenous grades of South West Bay. ... In days gone by the large sea-going canoes ... used to visit South-West Bay from both Tomman Island and Lambumbu. It is possible therefore that these large canoes were the principal vehicle for the diffusion of the Nimangki, and, provisionally, we may regard Tomman Island and Lambumbu as the two diffusion centres for West Malekula." Since LAYARD holds a similar opinion with regard to the origin of the monolith-using degrees, and traces their origin back even farther still, as we shall see, we must at this point express a few words of criticism about DEACON's point of view. WEDGWOOD, who prepared DEACON's notes for publication has objected: "the statement, that the Namu rank must be purchased from a man of Lambumbu may mean nothing more than so few men of Seniang ever attained to this degree that anyone wishing to do so had to seek for an introducer from the northern district. Secondly" and this is an even stronger objection still, "in the district of Lambumbu the Nimangki grades bear other names than in Seniang and the system of grading and purchasing objects is different from that of Seniang. Thus, though it seems certain that some at least of the sacred objects which are acquired at entrance to these higher grades are of Lambumbu origin, the names of the grades are not" ²⁾. Further objection can be raised to DEACON's opinion that the purchasing of certain objects from Lambumbu is proof of the introduction of the higher degrees above degree

1) 184 278-280. 2) WEDGWOOD in DEACON 184 279.

13; for, according to information which he has furnished himself, certain of these objects were used in lower degrees also; for example, the spider's web head-dress held firm by a certain cord imported from Lambumbu, is also used in the ranks 8 and 13¹). Some objection can also be raised to the argument that the tying of pigs to monoliths proves that these high degrees were introduced from Lambumbu, as pigs were tied to a wooden sacrificial pole also in rank 10 (rank "Mbalmbal")—a degree which was not introduced but was apparently original in Seniang. The following fact should also be taken into account: DEACON gives as one of the titles of his rank 5 (LAYARD's rank 9) "Vetn Mbuas", signifying "the stone's (i.e. the monolith's) pig" or "the pig's stone"²). Although there is no mention in the records of the tying of a pig to this monolith, the title is at least remarkable. The question becomes still more complicated by the very use of the monolith in LAYARD's rank 9, for which LAYARD was also unable to give any explanation apart from calling this use of the monolith "erratic". If LAYARD's supposition that a monolith existed in rank 14 ("Na-amal-won") prove to be erroneous, and that DEACON's rank 9 ("Naamel") (not mentioned by LAYARD) were to take its place, in which the monolith was used as mentioned, the occurring of this monolith in such a low rank would require explanation. We have no indication at all that DEACON's rank 9 is a "summing up" degree; and the designation "erratic" for these exceptions is a name only but not an explanation.

In the following we shall see on what grounds LAYARD bases his opinion regarding the introduction of the higher degrees with monoliths from Lambumbu. He says: We find that all those degrees taking the title of Mbalias (i.e. many of the ranks upwards from rank 14) are concerned with the erection of a monolith, whereas in the few degrees taking the title of Muluwun (i.e. rank 15, 17 and 26 according to LAYARD), monoliths are not mentioned. In Atchin there was a time, before the introduction of the monolith, when the corresponding degrees of Mulon was the highest available, and Mulon is said by the natives of the Small Islands to be the title of the existing "chief" of the Big Nambas. At Atchin there are historical records of the introduction of the degree of Mal, bringing with it the use of the monolith and taking a position superior to that of the already established degree of Mulon. It would appear, then, highly probable that the degree of Muluwun was firmly established also in the vicinity of South West Bay before the introduction of Mbalias. Also LAYARD emphasizes that certain objects of the Nimangki ritual of Seniang are obtained from Lambumbu, and he draws attention furthermore to the trade conducted between Lambumbu, across the neck of Malekula and up the east coast, with the island of Wala. Since, moreover, the arrangement of the monoliths of Lambumbu, as well as the names of the degrees there, show a close resemblance with

1) DEACON 184 306, 315. 2) DEACON 184 276.

those of the Small Islands, he concludes that "there is thus a considerable case for the comparatively recent derivation of at least the monolith-using degrees of the South West Bay Menggi from this north-eastern centre" ¹).

Here again arises the question concerning the use of monoliths in the lower grades 7 and 9 of LAYARD and DEACON's degree 9. And it must further be mentioned that, according to DEACON, the titles of the ranks 15 and 17 (i.e. DEACON's ranks 21 and 23) are not Muluwun, but Mbalias ²). Thus LAYARD's conclusion would imply that DEACON's titles were wrong and only LAYARD's titles right ³). Moreover, a wider survey of the New Hebrides shows that neither is the rank Mbalias so exclusively connected with monoliths, nor the rank Muluwun so definitely characterized by the absence of monoliths, as LAYARD believes. In a number of islands monoliths are erected in non-Mbalias ranks, and in other islands, where the ranks Mol, Moli, Mal, etc., corresponding to the Mbalias of Malekula exist, nothing is recorded of an erection of monoliths, though this may be due to a lacuna in our knowledge. Furthermore, in some cases quite the contrary to what LAYARD assumes, occurs: thus, in the rank Moli (rank five) of Tismulun, a stone table is erected, and in the rank Mal (rank nine) of Port Sandwich, a stone altar is built. On the other hand, in the rank Miliun (rank four) of Big Nambas, corresponding to the Muluwun of Seniang, monoliths are erected; this is also the case in the analogous rank Mweleun (rank twelve) of Ambrym (Sulol village).

These considerations show how uncertain DEACON's and LAYARD's arguments are even for Malekula alone. To draw from this the conclusion that monoliths in general belong to a more recent wave of megalithic culture, as LAYARD is inclined to do, cannot be justified at this stage, since material in support of this assumption is not available.

Sacred Plants. As has already been seen a certain number of sacred plants were used in the Nimangki rites. Here too the material is so abundant that for the sake of brevity we can only give a brief outline. The shrubs or trees used in the Nimangki rites are planted on the sides, around or behind the object erected in the Nimangki rite, i.e. the wooden or tree-fern image, the uncarved poles or the monoliths. In some cases these plants are bound to the object erected. It has already been seen that the ritual object erected, including the sacred plants, or the sacred plants alone, are surrounded by a rope on 4 stakes or a stone circle. The sacred plants planted within this enclosure are the following: *cordyline terminalis* (na-ari-mbrues) ⁴) in the degrees 3, 6, 8, 9, 10 ⁵); in the case of rank 9 the *cordyline terminalis* is only bound to the uncarved pole erected in this degree; another variety of *cordyline* (na-ari-tamat) is planted in the ranks

1) LAYARD 468 198 ff. 2) DEACON 184 275. 3) LAYARD's rank 26 is not mentioned by DEACON. 4) LAYARD 468 184, called naari mbruas by DEACON 184 317 etc. 5) LAYARD 468 157, 163-165, DEACON 184 299 f, 314, 317.

6, 8, 11, and 19¹⁾ and the red variety of the cordyline called naari memal in DEACON's rank 6²⁾. The general name for cordyline is na-ari³⁾.

The general name for croton is na-ai-limbr, i.e. "bad wood" (according to LAYARD) or naai-limbu (according to DEACON). Croton is planted in the ranks 8 and 19, croton of the kind ni-mel in the ranks 7 and 11, the croton variety nitor ombrung in rank 19, and "croton" (not specified) in rank 6. Erythrina (nandar) is planted in the ranks 6, 7 and 8, kava(?) in rank 11, cycas (nimweil) within the stone enclosure of rank 12 and this rank is itself called "Nimweil" after the cycas, and in rank 24 cycas fronds are tied to the monoliths. The rope surrounding the sacred object is entwined with coconut leaves in the ranks from 4 to 11 (safe rank 7) and coconut leaves are ceremonially used in rank 12 and 13. Besides these, a great number of other sacred plants are used during the Nimangki rites, but since they have not been identified botanically, I do not mention them here⁴⁾.

In *Seniang* there exists further another graded society, the Nalawan. DEACON records 20 degrees, membership of which is purchased also by the killing of pigs⁵⁾. At entrance into the first rank a small club house is constructed on the dancing ground and decorated with red crotons and red cordyline leaves. At entrance to rank 4, crotons are planted near the club house, a bamboo is planted outside the club house and decorated with croton leaves, and two carved posts of tree-fern are planted upright on either side of the bamboo. A pig's tusk and a small stone are wrapped up in croton leaves. With the stone the introducer strikes the candidate's wrist, lays the stone down on a croton leaf and then places the pig's tusk on the candidate's arm. This is almost identical with the rites in the Nimangki. Later a banana is planted at the side of the path where it enters the village, and round about it are set crotons of all kinds. In rank 5 carved tree-fern images are set up near the club house, and four red crotons of the varieties mbile and batapmbon are planted round them. Later a certain structure is erected which is exactly the same in appearance as that erected in the sixth Nimangki rank. Croton leaves are used to decorate it. A structure erected in rank 7 resembles that set up in the Nimangki rank Naamel, and is decorated with croton. At entrance to the eighth rank, a red croton is planted and a special mask belonging to this rank is tied to it; round this a smaller circle of crotons is set within which the pigs for the Nalawan are killed. In rank 11, six wooden images and six small gongs are set up near the club house; crotons are planted round the images, and red cordylines (naari memal) and a croton are planted round the gongs. As before, banana trees are planted and leaves of croton and naari mbal nerew cordyline are put around them. In ranks

1) LAYARD 468 163, 166, 173, 184, DEACON 184 314, 317. 2) DEACON 184 296, this rank is not mentioned by LAYARD. 3) LAYARD 468 184. 4) LAYARD 468 151, 161, 163, 166, 168 f, 170 f, 173 f, 182, 184, etc.; DEACON 184 274, 296, 299, 301, 308 f, 313 f, 317, 321, 323, 330, 334, 336, etc. 5) DEACON 184 387 ff, 384, 430, 432, 271 f.

13 and 15 wooden or tree-fern images are erected. In rank 16, a pole carved with a number of faces is erected just outside the club house and is enclosed by a circle of small upright stones (nonggob). Rank 17 is the first Nalawan degree for which a monolith is set up near the club house. It stands about 4 feet high, and is a rough oval in section. On one of the flattened sides, near the top, a face is carved. A tree-fern image is set up outside the club house and is enclosed by a stone circle, but the monolith is not enclosed by any stone circle. At either side of both these structures a croton is planted, and a green and a red cordyline (naari numbou timbarap and naari memal) are planted beside the tree-fern image. Conferring the armlet upon the candidate, the introducer takes a branch of the croton variety *nimbini* and on it he hangs the pig's tusk bracelet. Unfortunately there is no account of the rites of any grade of the Nalawan higher than grade 17. The Nalawan besides existing in Seniang and Wilemp Districts, had a much wider distribution, both in Malekula and Ambrym. The close similarity between many of the grade names of the Nalawan of the south coast of Malekula and those of the east of Milip and those from Seniang makes it indisputable that the Nalawan of the whole of this region is essentially the same. In Mewun many years ago the people adopted the Nimangki and in part the Nalawan. Before this there were apparently only two grades: Nalawan Awas, called after a variety of croton, and Nalawan Nei Tilöh, nei tilöh being the word used in a general way for all varieties of croton and comparable to the naai limbu of Seniang. In the dance associated with Nalawan, the men wore a croton called nelwas in their hair or in the belt. Whether this society exists in the districts of Lambumbu, Lagalag, and Laravat is not certain, but it seems probable that the Nimangki Tlel of Lambumbu, and the Nelan of Lagalag are, indeed, modified forms of the Nalawan of the south. From the area of the Botowut tribe, near Mt. Penot, the Nalawan society is also mentioned by HARRISON¹⁾.

From this information, which is quoted only in so far as it touches on the megalithic problem, it is evident that there does exist some similarity between the Nalawan and the Nimangki societies. In both we find wooden images, tree-fern images, carved monoliths, stone circles and the same degree of importance attaching to croton and cordyline. The Nalawan too is divided into ranks, and even the names of the ranks are in some cases similar to those of the Nimangki²⁾. Membership is also acquired by payment of pigs, as in the Nimangki³⁾. But contrary to the Nimangki each Nalawan rank has a certain mask⁴⁾, and in this respect it resembles the Tamate societies of the northern islands the close connection of which with the Suqe we have already pointed out. There are other important points of resemblance between the Nalawan and the Tamate: a man who does not wish to rise further in the Nalawan, performs a certain ceremony for

1) 342 100. 2) For this compare DEACON 184 274 f and 387 f. 3) DEACON 184 384, 394-398, 403, 410, 412, 416, 420, etc. 4) DEACON 184 385.

which he is kept in seclusion for one year in the club house. This corresponds to the seclusion usual in the Tamate Liwoa of the Banks Islands, one of the highest of the Tamate societies¹). The connection with the cult of the dead also closely allies the Nalawan to the Tamate. For instance the wooden cylinders into which they blow in the Nalawan rites²) are also used during the funeral rites of a member of the Nalawan³). As there is a resemblance between the Suge and the Nimangki, so is there a resemblance between the Nalawan and the Tamate; and since Suge and Tamate on the one hand, and Nimangki and Nalawan on the other, show a number of similarities, DEACON is certainly right in attributing all these societies—Suge, Tamate, Nimangki and Nalawan—to one culture only⁴). There can be no doubt that this is the megalithic culture, since we have observed the close connection of all these societies with megalithic stone-work.

Although no stone-work is erected on graves in Seniang, we must nevertheless mention the very characteristic skull effigies of South Malekula which are used also in Seniang. These commemorative statues, called rambaramp, have a body carved out of tree-fern. On the skull, which has been removed from the body, a face is modelled with as great a likeness to the dead man as possible. From the fact that the size and the decoration of the rambaramp correspond exactly to the position of the dead man in the Nimangki, Nalawan and Nevinbur, DEACON concludes, rightly, "that the practice of making such effigies was introduced into the southern district of Malekula by the same people who introduced these associations, and it strengthens the supposition that the latter are definitely connected with each other. The origin of the rambaramp is attributed, in mythology, to the eldest of the five Ambat brothers."⁵). DEACON is certainly right in his conclusion, since the Ambat brothers are representatives of the stone-using immigrants, as we shall see later, and we are in consequence entitled to attribute these effigies to the megalithic culture.

In the coastal districts of Seniang a wall of coral blocks is set up for a boundary between the different local clans⁶).

Mewun, the adjoining region of Seniang, belongs to the culture area of the fringe skirt of banana fibre, where the Nimangki is typically absent. But *Mewun*, which is linked with Seniang through the Kabat mythology

1) DEACON 184 386. 2) DEACON 184 385, 391 f. 3) DEACON 184 392, LAYARD 468 206; for further resemblances of the Nalawan to other societies, see later. 4) DEACON 184 705 ff; DEACON attributes the Nevinbur society also to this culture, for, besides other reasons, the Nevinbur society has some mythological connection with Nevinbumbaau who plays a certain part in the mythology of the Ambat; for a detailed description of this society see DEACON 184 461-468 and fig. 29 p. 463; it may be mentioned here that black croton is also used as a badge in this society. DEACON 184 573. 5) DEACON 184 533, 544, 545, 547, LAYARD 468 205-208; numerous descriptions of these effigies have been given in existing literature. See HADDON in 711 340, SOMMERVILLE 786 392, FLOWER 254 76, 79-81, ELKINGTON 226 167, GOODENOUGH 295 335, etc. 6) DEACON 184 172.

(corresponding to the Ambat of Seniang) and allied with Seniang by inter-marriage¹), has also recently acquired the Nimangki from Seniang²). DEACON gives no detailed description of the Nimangki rites, but CHEESMAN describes the dancing ground of Leortamismuch village, which is apparently identical with the Loktemesmok of DEACON's map, in the following way: "The dancing ground ... was square; ... two sides bush with large stones at the edge irregularly placed ... they were only used for tethering the pigs that are sacrificed. One side of the square was the boundary fence of the village, and on the fourth crotons had been planted"; carved tree-fern figures were also there³).

The methods of the disposal of the dead are very much the same as in Seniang. After the skull has been removed it is kept until the next Nalawan ceremony, when it is carried to the logho, the sacred place of the clan. Here it is put into a shallow hole with a circle of small stones around it, and a big stone slab over the top. The other bones are placed into the logho. This method holds good for all the inhabitants of Mewun, except for a certain group in the village of Melpmes. This will, however, be discussed later, since it requires a knowledge of certain myths which will be discussed in the chapter on "Mythological Evidence".

DEACON's information about the Nimangki society of *Lambumbu* is unfortunately not so detailed as in the case of Seniang. DEACON mentions the names of 28 ranks, but it is not very clear whether they actually represent different degrees, or whether some of them are only subdivisions of the same degree⁴). In the first five degrees a number of stakes are set up in a straight line and to each of these a pig is tied. At the first Nimangki rank ten pigs are tied to ten wild canes planted in a line on the dancing ground; in the second rank the posts are of naar wood, in the third of erythrina (*nenrar*) wood, in the fourth of cycas (*nimwil*) wood, and in the fifth rank of hard nator wood "after which a man will have attained sufficiently high status to have the right to erect a line of small monoliths (*nevat*)". These stones to which the pigs are tied before being sacrificed are planted in a line on the dancing ground. The method of killing the pigs in *Lambumbu* is to hit them on the head with a stone⁵). The use of the "stone-child" as in Seniang, is not recorded from *Lambumbu*. Rank 27 is called "Rus Nevat" meaning "tie to a stone"⁶) from which it is certainly evident that in this degree also a pig was tied to a stone.

It is said that on the hills to the south of *Lambumbu*, lines of upright stones are to be seen which are used during the ceremonies for the titles above and including rank 12, while for the two lower ranks in this district, a row of cycas trees (*nimule*) is set up and the pigs attached to these⁷).

How abundant the megalithic stone-work is in this region is evident from

1) DEACON 184 91. 2) DEACON 184 11. 3) CHEESMAN 138 151 f. 4) See DEACON 184 342. 5) DEACON 184 348, 353-355. 6) DEACON 184 342. 7) DEACON 184 348 f.

the following description given by DEACON ¹⁾: "The dancing ground ... of Sarembal village in Lambumbu ... is approached along a path running down the middle of an avenue of upright stones (nevat nen rasugh) some 840 yards long. There are altogether 218 of these stones which are arranged in successive pairs on either side. This avenue opens out into a rough circular space measuring approximately 60 feet in diameter, and enclosed by 34 monoliths of from 4 ft. 6 in. to 6 ft. 8 in. high called nevat nen rendel. These, too, are arranged approximately in a circle except for those between the numbers 9 and 25, which are set up almost in a straight line. Between these 17 monoliths, horizontal slabs of stone are placed, piled four deep, so that they form a kind of stone wall or partition. This is called the nang-guranggur nevat, and serves to separate the most sacred part of the village from the rest. At either end of it stand tree-fern images... or images carved in other woods ... and behind it, outside the dancing ground, is a raised plot of ground on which the club house is built ... On the side of the dancing ground ... grows a gigantic banyan tree. Approximately in the centre of the dancing ground is a rectangular stone slab measuring 2 by 2½ feet, resting on four uprights. This serves as a seat for the man who is beating the gongs. It is called loghola, which is the name of a certain variety of bird, and the four supports are netalu loghola, the feet of the loghola... Beside this stone seat are three gongs... Leading out of the dancing ground, on the side opposite that by which it is entered, is another avenue of stones. This one is only 440 yards long and is composed of 60 pairs of stones. In both avenues the first and last pairs of stones are much larger than the remainder. In that approaching the dancing ground the terminal stones measure 5 ft. 8 in. and 4 ft. 10 in. with a circumference almost as great, but the finest specimens are the monoliths where the avenue runs into the dancing ground. One of these is 6 ft. 8 in. high, carefully shaped to a cylindrical form—so carefully, indeed, that over the whole length the circumference only varies between 4 ft. 6½ in. and 4 ft. 8 in. All these stones, both the blocks and the monoliths, were set up when ... the father of the present chief of the village purchased the highest Nimangki" (i.e. rank 28). To each of these 372 stones on the dancing ground and the two avenues, a pig was fastened during this ceremony ²⁾ (see fig. 4 on p. 49).

In other parts of Lambumbu avenues of stones are to be seen and these, like the stones in the dancing ground, are used ritually to tie pigs too, when any important Nimangki ceremony is taking place. On the border of the dancing grounds croton bushes are planted ³⁾.

1) 184 28-39, fig. 2 p. 29. 2) DEACON 184 349. 3) DEACON 184 30, 358, 364, 368, 370 f; a similar description is given by LEGGATT 483 17, quoted also by SPEISER 789 385, of "West Malekula" but without precise indications as to locality. He says: "The Amil is approached by a well-kept path along which upright stones and dark-leaved crotons are set at alternate intervals. In the square there are alternate circles of upright stones, carved posts, and in the centre, huge drums and images".

In the following pages we shall discuss the Nimangki Tlel society whose connection with the Nalawan of Seniang on the one hand, and the Tamate societies on the other, has already been mentioned. Nimangki Tlel, meaning the "Sacred Nimangki", is found throughout the district of Lambumbu and in the villages to the south. It is very different from the ordinary Nimangki, but here also, the buying of certain sacred things is common. The Nimangki Tlel appears to be divided into four grades: Nimangki Misi, Naai Rivrap, Naai Möröh and Nōwei Tavöt. "A closer examination shows, however, the



Fig. 4. Plan of dancing ground of Sarembal (After DEACON 184 29)

- = Upright Monoliths
- = Four slabs of stones laid on top of each other
- = The three principal gongs

first two, and also Naai Möröh and Nōwei Tavöt as two pairs, indeed as being two societies." On dancing, a man of the Naai Möröh has a croton leaf in his hair. At Nimangki Misi, when dancing, a "hat" is worn, the dancer being guided by a man carrying a branch of croton. The Nimangki Tlel embodies a cult of a large number of natural objects, trees, birds, aquatic animals etc. Each of the two societies "owns" a number of them. Among the many objects belonging to the Nimangki Misi, DEACON mentions also a yellow cycas (*nimwil lülüt*), hibiscus (*ninsonggul*), the hawk (*nem-bal*), black croton (*nimwilmbong*, *nimwilemet*), etc.¹).

1) Although we have repeatedly come across the black croton as the badge of high degrees, the name DEACON gives needs verification, since *nimwil* in Lambumbu and *nimweil* in Seniang mean cycas.

Among the objects belonging to Naai Möröh, DEACON mentions also the cordyline (naari möröh). The croton (nensah) is par excellence the sacred tree of the Nimangki Tlel as a whole, the numerous varieties being divided between the two societies, and their leaves being used as tokens. Another distinction between the two societies lies in the names which their members receive at their initiation; nearly all those given to the members of the first society are compounds the first element of which is the word "vat", meaning "stone"; members of the second society receive names in which the word (ne)mbang, the banyan, forms the prefix. During the dances of both groups each performer carries over his shoulder a cordyline. The incident, which



Fig. 5. Small dolmen, Malekula. (After DEACON 184 447 Fig. 28)

is necessary before the initiation into the Nimangki Tlel can be performed, is the death of one of its members, the real starting point being the exhumation of the bones of the deceased. The ceremonies will then take place in the sacred place (loghor)¹). Here they set up a kind of small dolmen-like box, about one foot high, made of four stone slabs with one side open and in this they place the skull and long bones (fig. 5).

Then begins for the novices a period of seclusion in the club house for 3 or 4 months, during which they undergo thrashing with the nettle-tree leaves. The secrets of the society revealed at seclusion are the construction of the masks and the sacred sounds. One of these is called "the crying bird" and it is produced by a short piece of bamboo. The other sacred sound is made with a reed, and is played by the novices to warn women of their approach²). DEACON was impressed by the similarity between the Nimangki Tlel and the Tamate societies, but he did not analyse these similarities, and WEDGWOOD thinks that owing to the fragmentary nature of DEACON's written record it is not possible to do so in a satisfactory manner. As she has rightly pointed out many elements of the Nimangki Tlel are characteristic of the Melanesian secret societies in general. These elements

1) This corresponds to the nembrmrkon, where the bones of the dead are deposited in Seniang. 2) DEACON 184 436-456, fig. 28 447, 573, CORLETTE 173 VI 60-62.

are: the seclusion, the thrashing, the masks, the flute-like instruments, etc. WEDGWOOD has furthermore drawn attention to the fact that the origin myth of this society ¹⁾ resembles the origin myth of the Nanga society of Fiji ²⁾.

This origin myth is characteristic of the Melanesian secret societies in general, and in fact the Nanga was brought by dark-skinned Melanesians who are not to be confused with our stone-using immigrants. Moreover, the Nimangki Tlel has this in common with the Nanga society, that both are divided into two different societies (Veisina and Rukruk in the case of the Nanga) neither of which is permitted to learn the other's secrets.

I do not intend here to discuss in detail the secret societies of Melanesia, but their distribution in Melanesia leads to the conclusion that they cannot be identified with the graded societies. The latter are found only in the New Hebrides in a highly developed form, where their connection with the culture of the stone-using immigrants is beyond doubt. In this study we shall not discuss to what extent these graded societies became mixed with the general Melanesian secret societies. It seems, however, most probable that the Nimangki Tlel — a general Melanesian secret society — adopted certain elements of the culture of the stone-using immigrants, such as the erection of the dolmen; and it is interesting to note that the placing of the skull and the bones into the dolmen is not merely a privilege of the members of the Nimangki Tlel, since elsewhere DEACON records this as being the usual manner of disposing of the skull. Only the magician is excepted from this rule, and his skull is put into the club house ³⁾. The use of sacred plants, the elements of the names meaning "stone" and the buying of sacred things seem accordingly to be borrowed.

Apart from the dolmen into which the skull is placed, no other stone-work is mentioned in connection with burial. It may be mentioned only that on the 30th day after the death of a man of very high social status certain reed structures are built, one on the dancing ground and the other on the beach, decorated with various objects representing the dead man's Nimangki status. Croton, cordyline, cycas and erythrina may be seen on these structures. From the structure on the beach long lines of monoliths, the symbol of the high rank of the dead man, stretch along the sea shore ⁴⁾.

In *Lavarat* village, north of Lambumbu, as the Nimangki ritual is the same as in Lambumbu, it is usual to set up commemorative structures corresponding to the rank of the dead man. A circular enclosure, called *rien* long, made of certain trees, is set up to surround one or more croton bushes. If the dead man had acquired those high titles of the Nimangki at the purchase of which the pigs killed are tied to stones, upright stones are

1) A woman received first the secret of this society and passed it on to her two sons without letting either know the secrets of the other. Then, in order that no woman might ever know the secrets of the society, the mother committed suicide.

2) WEDGWOOD in DEACON 184 445 f. 3) DEACON 184 564-575. 4) DEACON 184 571.

erected round the rien long; if he had only bought the lower titles, for which the pigs are fastened to shrubs such as nator, cycas or erythrina, then these are planted about it. The track leading from this enclosure to the house where the dead man has been buried is carefully swept so that the ghost may pass along it noiselessly. Near the rien long four crotons are placed in a row and the four grave diggers come and squat down one in front of each croton. Then the first man picks up his croton, the other three do likewise and follow him. The four go to the house of the deceased, where the body is interred. On arriving there the leader calls out: "Arise, come and look at thy garden". All four then shake their croton at the open door after which they plant their crotons two on either side of the building. These crotons are now no longer "potent" and it is safe for anyone to touch them. The shaking of them at the open door is supposed to make the ghost of the dead man come out and proceed to the rien long, which is the special enclosure set apart for it¹). This is the same ritual "fishing for the soul" as we have found in the Torres Islands (there with cordyline) and is a custom we shall come across often in the course of our study.

Burial in a dolmen is known here also, but the position is reversed, as compared with Lambumbu, for the skulls of ordinary men are placed in the club house, while those of sorcerers, together with their bones, are deposited in a small stone chamber similar to that of Lambumbu²).

We have no information on the Nimangki rites from *Lagalag* District adjoining Lambumbu. But here the Nelan society is found, which closely resembles the Nimangki Tiel of Lambumbu. The society has five grades. Seclusion and thrashing are also usual in this society. Each candidate is invested with a head-band, into which leaves of the croton variety nem-bangg lulu are thrust. This is also the name of one of the Nelan structures³). The conclusion which we have reached regarding the culture to which the Nimangki Tiel belongs holds good also for the Nelan society.

DEACON has published a plan of the dancing ground of Epmunbangg, *Lagalag* (see fig. 6 on p. 53). G are the gongs, the small circles are the monoliths surrounding the dancing ground.

It is evident that we are confronted here with a similar arrangement of monoliths round the dancing ground as in Lambumbu. The stone-work along the avenues recorded from Lambumbu is not mentioned here, but DEACON's drawing of *Lagalag* likewise shows several roads leading up to the dancing ground, and it is probable that these roads are likewise broad avenues as in Lambumbu.

In the secret society of the women, "Langanbas", a certain tree surrounded by cordyline is planted in the centre of their dancing ground. The pig which a woman pays for her new title in this society is fastened to this tree⁴).

1) DEACON 184 575 f. 2) DEACON 184 575. 3) DEACON 184 458. 4) DEACON 184 496.

In the *Big Nambas* region, HARRISSON distinguishes five different groups: 1) the coastal group comprising the villages Tonmeal, Matavanat, Wowo, and Pinalum; 2) Small Nambas, 3) Middle Nambas, 4) Telag and Lagalag, and 5) Big Nambas. On the other hand there exists a relative uniformity of the culture and the language¹). The Nimangki society with all its characteristic features is found here again²). There appear to be four Nimangki grades. The pigs which are paid for entrance to the first and

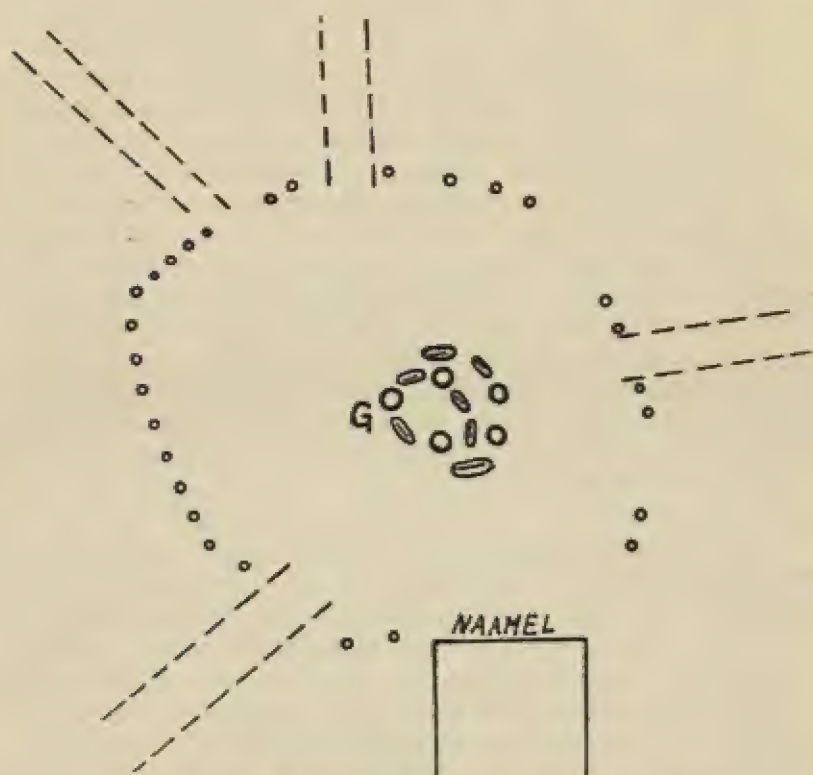


Fig. 6. Plan of dancing ground at Lagalag, Malekula

(After DEACON 184 515, fig. 34)

second grade are fastened to stakes which, at the rites of the second grade, are made of cycas wood. At entrance to ranks three and four, a long line of stones is erected. These monoliths vary in height from about 3 to about 5 feet. Near each is planted a cycas. The pigs tethered to these stakes and stones are killed by clubbing on the forehead, but not on stone tables as is the practice in Santo for instance. A wooden image, *temah*, (which

1) HARRISSON 342 105. 2) HARRISSON 342 104-109, DEACON 184 371 ff, 373 Note 1, CHEESMAN 138 168, 175, 194, 139 202, WATSON 920 132 f.

evidently corresponds to the "temes" of the south) is erected only at entrance to rank four ¹⁾).

Regarding the Big Nambas village Tnmaru, CHEESMAN records the following ²⁾: "One of the alleyways near the boundary of the village was marked by a series of stones ... There seemed a great number of them ... The chief referred to them as the stones to which pigs had been tied on the occasion of a great feast made by ... one of his ancestors. Actually 800 pigs had been sacrificed at ... the feast held when he became "king".

Coming to the village Varass, south of Tnmaru, CHEESMAN ³⁾ followed "a broad path cleared of shrub and bordered on both sides with coleus ... of one variety only, with blood-red leaves ... The avenue must have been half a mile long, and then one entered a clearing" with the houses and the gamal. We are not told by CHEESMAN whether the avenue of this village was bordered by monoliths too, as was the case in Tnmaru. In any case we find the same avenues here as in Lambumbu and Lagalag ⁴⁾.

Regarding the Big Nambas District there are three different accounts in DEACON's notes of the treatment of a chief's body, and from the evidence available it is not possible to determine which is the more accurate one, says WEDGWOOD ⁵⁾. One account states that burial was practised for chiefs, either inside the dead man's house or in the club house. On the 30th day after death the head is taken and put in the skull house, where it is laid on a slab of stone at the far end. According to the other two accounts, the body of a chief is not buried, but exposed on a low platform of stones, built inside the club house. When the body has decayed, the skull is removed and put under a stone slab supported by four uprights at the end of the club house farthest from the door. Here it remains until the next Nalauan ceremony is held, when it is carried to the ut lalo, the sacred place of the clan. This information is confirmed by HARRISON ⁶⁾ who saw skulls "Inside the lodge ... on a low stone dolmen at one end".

With regard to North-west Malekula, SPEISER quotes the following information from CROMBIE ⁷⁾: "I was taken to a place, where a house was built over his grave ... All round were stones, under which were buried the

1) The dancing ground is called here "nesara", HARRISON 342 109. This word which is identical with "sara", dancing ground of Aoba and "ti nesara" of Pentecost (SPEISER 789 119), shows, among other things, how far-reaching are the cultural connections in this region. 2) 135 197. 3) 135 209. 4) The existence of the Nalauan society in Big Nambas and the Nilan society in Small Nambas must briefly be mentioned. See DEACON 184 432 f. 460. Here too, the connection with the funeral rites is characteristic of the society. The celebrating of a Nalauan is associated with the removal of the chief's skull from the dolmen in the club house where it had been deposited to its final abode in the sacred place of his clan. Carrying out this rite the members of the Nalauan society swing bull-roarers. Although DEACON does not mention any period of seclusion in connection with the Nalauan or Nilan society, HARRISON says with regard to Big Nambas: "At the native new year, periods of seclusion are devoted to the spirits", 342 113. 5) DEACON 184 582-584. 6) 342 106. 7) SPEISER 789 306, CROMBIE 175.

skulls of other chiefs, who had died." SPEISER continues, saying: "We thus have the same mode of burial here as in Central Malekula ... Important men are buried at the end of the club house. Then after the celebration of the last death feast, the skull is removed and is buried at the periphery of the dancing ground (beneath stone slabs)"¹). For Northwest Malekula and Central Malekula SPEISER records: "Men and women buried in graves near the village, "chiefs" buried in the men's house or secondary burial of the skull beneath stone slabs on dancing ground"²).

If we compare SPEISER's information with that of DEACON, we must first take into account that the former applies to "North-west Malekula" but we are not told whether by this is meant the Big Nambas region. If CROMBIE said: "Around were stones under which were buried the skulls of chiefs" the word "around" may mean all around the grave which was itself in the house. On the other hand it does not naturally follow from SPEISER's text that he has himself seen this dolmen containing the skulls at the periphery of the dancing ground, or whether he only concluded this from the word "around" in CROMBIE's text. In the latter case there would be no need to interpret CROMBIE's text in the way SPEISER has done, and the dolmen may very well have been in the club house. This would tally with the description of DEACON and HARRISSON. Or, finally, it may possibly be that this is a local variation of the custom, or, again, that there is no hard and fast habit at all. For example, the corresponding platform in the Senbarei District is erected either within the house or outside it. Nevertheless there is still a certain amount of contradiction between this and the information given by DEACON, who maintains that in the case of secondary dolmen burial in Big Nambas, there is no preliminary earth burial. But this might also be local variation, since the Big Nambas burial in a dolmen is usual with chiefs, whereas in those regions where earth burial precedes the dolmen burial (Lambumbu and Senbarei), this applies to the ordinary man.

SPEISER gives analogous information with regard to *North Malekula*, when he states³) that the dancing grounds are surrounded by "stone monuments and stone tables". Some of these are very big, covering the skulls of men of high Suqe rank. The place is surrounded by stone altars consisting of coral blocks heaped up irregularly, upon which a man dances during the pig-killing rites. The existence of these stone altars in North Malekula, which, as we have seen, was not mentioned in Big Nambas, is also confirmed by HARRISSON, who records the following in regard to Matanavat village on the northern part of the west coast of the Small Nambas region⁴): "At Matanavat and an extinct village nearby on the coast, there were remarkable rites of human sacrifice connected with the highest grade of the Mangke (called here Maki). These involve stone-works ... The hawk, the snake and the cycas palm ... are of special significance in this rite. The title

1) SPEISER 789 311. 2) SPEISER 789 311. 3) 789 385. 4) 342 110.

of one who has sacrificed a human is maltanas ... A boy ... dances up to the chief, who is seated on a stone altar in a special open hut under a hawk effigy. Suddenly ... he is clubbed on the head with a ritual club. It is most significant that the Matanavatese never eat human flesh". Elsewhere HARRISSON says of the Small Nambas region¹⁾ "Stone dolmens are used in the Maki rites". Unfortunately there is no uniformity in the terminology of most writers, but it is probable that what HARRISSON here calls "dolmens" is identical with the "stone altars", the use of which he had noticed in the Maki rites of the neighbouring Matanavat village. This is certainly identical with what SPEISER calls "Steintisch" or "Tanz und Opfertisch"²⁾.

The Small Islands: North-east of Malekula, the "Small Islands" (Vao, Atchin, Wala, Rano and Uripiv) form an ethnic unit. Racially they vary from a comparatively light copper coloured skin to much darker pigmentation. The mixing of dark-skinned and light-skinned elements of Vao goes back to an invasion from Aoba bringing elements with light skin and almost straight hair. Vao furthermore, was peopled from Malekula³⁾, to which culturally it is very closely related, and where many of the inhabitants of the Small Islands have their gardens⁴⁾.

On Vao such an abundance of stone-work is found that many writers have been most strongly impressed by it. Here too, the Nimangki society exists with all its characteristic elements⁵⁾.

On Vao and the other neighbouring islands, particularly Atchin, big altar-like stone tables of coral slabs stand around the dancing grounds. Beneath these, the skulls of high Suqe members are buried⁶⁾. By the side of these, there are carved wooden images, drums and little "ancestor huts". The stone tables are very often so close together that they form an almost continuous wall around the dancing ground⁷⁾.

Broad avenues leading up to the dancing grounds are bordered by little stone tables and monoliths, standing in several rows. There are often five or more of these stones standing one in front of the other. Their height varies from the size of a head to the height of more than 3 feet. Each stone is a monument erected for a pig sacrificed. As these avenues approach the dancing ground, the stones are particularly numerous and then surround

1) 342 105. 2) Under "house surrounded by walls" MILKE (757 18) also mentions North-east Malekula, but I cannot find a basis for his assertion. 3) LAYARD 470 342, SPEISER 791 458, 789 57, 59 f, 790 75. 4) LAYARD 470 342, SPEISER 791 458, 792 88, CHEESMAN 138 62, 66, 68, RENAUDY 710 131. 5) SPEISER 790 63 f, 66, 791 460, JOHNSON 418 95, 145, RENAUDY 710 132, 135, etc. 6) SPEISER 789 386, 388, Pl. 101 fig. 2, 790 239, 791 459, 792 Pl. p. 85, Pl. p. 92, RIVERS 725 II 429. 7) SPEISER 789 386 Pl. 86 fig. 5, Pl. 88 fig. 1, 6, 790 60 f, Pl. 19, 21, 791 459, BROEK D'ORREMAN 98 113, JOUÿ 419 362 f, OLIVEAU 624 341, 346 who says of the supporting stones that they are one metre high; RENAUDY 710 130 f; LAYARD 468 147 records the existence of dolmens, stone platforms and wooden images, but expresses the opinion that monoliths are less conspicuous in Vao than in Atchin.

the square on three sides, two, three or more deep¹⁾. These monolith-bordered avenues are identical with those we have come across in Lagalag, Lambumbu and Big Nambas. It has already been mentioned that CAPELL, when recording the existence of "altars of heaped up stones" on Santo, further remarked that they „reappear on Vao"²⁾.

With regard to burial on Vao, Atchin, and the other neighbouring islands, SPEISER gives the following description: men of low rank are buried superficially in the house. Later the skull is buried in a common grave some distance from the houses, and like the latter these graves are also surrounded by a low stone wall. Men of high Suge rank are not buried in their houses but in special graves which are surrounded by slabs of coral³⁾. After the last death feast the skull is exhumed and buried beneath the stone tables in front of the little "ancestor huts" on the dancing ground⁴⁾.

In the little ancestor huts of Vao and Atchin there is sometimes a monolith, and the horizontal stone slabs of the stone tables beneath which the skulls were buried, in some cases form a kind of foundation for the "ancestor huts", as SPEISER puts it⁵⁾.

On Vao Island every village possesses several men's houses and dancing grounds⁶⁾. The men's house is built upon a piece of ground artificially levelled by stone and earth-work, and surrounded by a stone wall or a fence. At both ends of the men's houses there are very big coral slabs each supported by two stones, which SPEISER, on one occasion, calls thresholds; on another he says merely that they narrow the entrances of the men's house⁷⁾. He gives no further information regarding their use.

Round the men's houses there are numerous old wooden stakes⁸⁾. But since SPEISER has made but very few observations about the Nimangki rites, and we dispose of no other information on this subject, we do not know whether these stakes were used in the rites of the Nimangki society or not.

Every family compound is surrounded by a stone wall about three feet high, built of loosely heaped up coral blocks. The entrance is simply a gap in the wall. Between these stone walls there are narrow paths⁹⁾. The houses of men of very high rank are at some distance from the village and, these too, are surrounded by a stone wall¹⁰⁾.

Opposite Vao, on the old dancing ground of an abandoned village of

1) SPEISER 789 103 106 f, 386, Pl. 87 fig. 7, 790 60 f, 791 459, 792 91-93, JOLY 419 362 f. 2) CAPELL 121 54. 3) SPEISER 789 Pl. 86 fig. 4, 790 Pl. 60, the latter photo is from South Malekula where the same stone-work is used for graves, the only difference being that the wall of coral slabs is erected for men of middle rank in the Suge, whereas for men of high rank, statues with modelled skull are made. 4) SPEISER 789 Pl. 88 fig. 1, fig. 6 (this latter picture is from Atchin), 790 Pl. 21. 5) 789 388, 790 71. 6) SPEISER 789 Pl. 10 fig. 6. 7) 789 116, 790 62, text to Pl. 22, 792 94. 8) SPEISER 789 116, Pl. 15 fig. 1, 790 Pl. 22, Pl. p. 62. 9) SPEISER 789 102 f, 116, Pl. 15 fig. 4, 790 60, 62, Pl. 20, 792 94 f, Pl. p. 106, JOLY 419 360 speaking of the "Small Islands" in general; OLIVEAU 624 346. 10) SPEISER 789 116.

East Malekula, where the Vao people have their gardens, an enormous monolith was found broken in two. The lower part measured more than 3 feet in diameter and the height of the entire monolith must have been about 17 feet¹).

The Nimangki Society ("Maki") with all its characteristic elements is found again on Atchin Island, which racially and culturally is identical with Vao and the inhabitants of which also have their gardens on Malekula²).

Whereas in most parts of Malekula the Nimangki rite is an individual one, performed by one man at a time, in Atchin and the neighbouring islands, owing to their possession of an anomalous kinship system, it is a communal one. There are two kinds of Maki in these islands, according to LAYARD; in that which he considers to be the older form, still practised in the village of Petehul on Vao, there are two monuments only, a large dolmen and a stone platform, at each of which the sacrifice is made. In the more recent use as practised on Atchin, ten shrines are erected along one side of the dancing ground, each consisting of a dolmen behind a monolith and an anthropomorphic carved wooden image in front, representing the ancestral spirit, surmounted by a roof of which the ridge-pole, resting on the head of the image, represents the head and the wings of the mythical hawk (this is the "Ahnenhäuschen" of SPEISER). By the side of each shrine nine further dolmens or monoliths are erected, the whole forming a continuous line of a hundred stones. Behind all these stand two stone platforms, —one for each of the two social groups—also furnished with images and roofed. On the other side of the dancing ground there is another continuous line of a hundred small stones. These stones all represent ancestors, and it is to them and to the images that the sacrificial boars are tied³).

It has, however, already been seen that all these elements, including the monoliths, are also found together on Vao. To conclude from the absence of monoliths in Petehul on Vao, that the dolmens and stone platforms there must be more ancient than monoliths, is, in my view, a mistake, and until no other proof is forthcoming I can only qualify this opinion as an unjustified generalisation.

On Atchin also, the houses are "behind a native-style stone wall"⁴).

SOMMERVILLE⁵) gives the following record of Uripiv, the most southern of the Small Islands: "In the dancing ground, or "emil", there were ten demits of wood, five of which flanked on either side the central great coral stone, whose penthouse roof was supported by an unpainted carving of a man and a woman, while in front of it stood a smaller carved human figure,

1) SPEISER 789 361, 790 60, 792 91. 2) LAYARD 468 144 f, 470 342, 344, 350, HARRISON 344 339 f, CHEESMAN 138 62, 66, 68, WATSON 919 85, 920 124. 3) LAYARD 470 343-347, 468 147, 203, HARRISON 344 340, SPEISER 790 Pl. 17, 18; regarding the stone tables SPEISER mentions again that the pig-killer dances upon them (text accompanying Pl. 17). 4) HARRISON 344 340. 5) 787 12 f, 15 f, Pl. II.

apparently ambisexed ... Planted round the "emil" were, as usual, croton bushes and dracaena trees. Along the bush track, for about 50 yards before arriving at the ground, were set up quantities of small flat stones like rough gravestones, which were placed, one for every pig that had been sacrificed on the ground. We arrived at Uripiv, one evening, to hear that a great feast, a "Maki", was to take place the following day ... A pig was killed. The ... beast was then carried off, and bundled through to the altar of the demits, to whom it was sacrificed, and to whose roof post it was then tied up. This sacrifice was performed until each demits had his pig." From this description it is evident that all the elements we have come across in the other Small Islands are found here again, viz. the Nimangki, altars (probably of stone), monoliths and carved wooden images; also the large avenues leading to the dancing ground and bordered by monoliths.

At *Port Stanley* on Malekula, south of the Small Islands, SOMMERVILLE¹⁾ saw two large heaps of stones near the beach, which a native told him were chiefs' graves.

In the *Senbarei* District of East Malekula, the Nimangki society ("Mangke") is again found with all its characteristic features²⁾. DEACON mentions 9 ranks but SEBBELOW, speaking of "East Malekula", gives only 6, the names of which, however, are almost all identical with those given by DEACON. According to SEBBELOW, each degree is subdivided, so that there is not necessarily a contradiction between DEACON and SEBBELOW. DEACON was told at *Senbarei* that each grade has a variety of croton (*neghegh*) which is sacred to it. Besides this the *cordyline* (*hari*) and the ginger belong to the *Mangke* in general, while the *hibiscus* (*sanggour*) is a badge of the grade *Miliun* (i.e. DEACON's grade 6) whose members are regarded as „chiefs". At entrance to every rank, an image, *temigh* (which corresponds to the *temes* of the west), is set up and over it is erected a platform of bamboos supported by four posts of *erythrina* wood (*nerer*). This structure which is decorated with *cycas* leaves (*namwer*) is called *hetoro*. The candidate ascends to it, and here, standing above the image, kills the sacrificial pig. (This wooden structure thus corresponds functionally to the stone tables in the other parts of the island, on which the candidate kills the pig.) For some of the grades or perhaps for all, stones are set up at the dancing ground, and a pig is killed for the erection of each³⁾. The *cycas* is also the symbol of peace and the cessation of hostilities⁴⁾.

With regard to burial DEACON gives the following information of the *Senbarei* District⁵⁾. A poor man was said to be buried in a prone position. The grave was near the village. A chief was put on a platform and his body allowed to decompose until only the skeleton was left. If the dead man was a member of a Nimangki grade then at the next celebration of the rites of entrance into this grade his skull and bones would be exhumed

1) 786 391. 2) 2) SEBBELOW 766 274 f., DEACON 184 379. 3) DEACON 184 379 f.

4) DEACON 184 380. 5) 184 380 and 385 f.

and deposited in the charnel house of the clan. Here as in the west, it is placed in a little stone chamber composed of small uprights and a single covering slab. As an alternative to this, the removal of the skull to the clan ossuary might take place on the occasion of the Ruan celebration¹⁾.

In *Port Sandwich* the Nimangki society, according to DEACON, has 9 degrees, the names of which for the most part correspond to those of Senbarei. For the degrees 5, 6, and 7 an image called temij is erected. This is covered by a platform of bamboos, to which steps lead up. The supporting posts are decorated with cycas fronds (namwil). The candidate ascends the platform, and the pigs which he is to kill are handed up to him. For rank 8, a wooden image is planted, and round about it cycas leaves are placed. For the highest rank 9 (called Mal) a kind of stone tower is constructed around the foot of which cycas leaves are laid. This is built near the club house, and on it the candidate kills a number of pigs. Other pigs are killed in the house of a man belonging to rank 9, which is surrounded by a high stone wall²⁾.

SOMMERVILLE gives the following description of a supposed peace ceremony of Port Sandwich³⁾: Ten posts were set up on the dancing ground, the post at each end being croton bushes. The vanquished party brought pigs until one pig was tied to each post. Then the chief of the conquering party pushed down the two croton bushes. The vanquished party brought still another young pig which they killed and left behind. They then went away.

It is probable that we are here in the presence of a Nimangki rite misunderstood by SOMMERVILLE, although in other records there is no mention of stakes to which, in the Nimangki rites, pigs are tethered. On the other hand, if what is described is really a peace ceremony, it may certainly be inferred that the Nimangki rites had served as a model.

In the *Maskelyne Islands*, south-east of Malekula, the Nimangki has 10 degrees. Comparison of the grade names with those of Seniang shows that both regions have certain degree names and titles in common⁴⁾.

From rank one to rank seven carved wooden images or tree-fern images are set up. In rank 9 a figure is placed under a thatched roof. Behind it

1) Since in these notes it is said that the placing of the skull in the dolmen follows the exhumation, and DEACON has previously said that earth burial is customary for poor people, it must be concluded that it is the skulls of the poor people which are deposited in the little dolmen. This would correspond to the custom of Lambumbu. In the Ruan society the candidates are beaten with leaves of the nettle tree, as was also the case in the Nelan of Lagalag and the Nimangki Tiel of Lambumbu. This similarity, as well as the opinion of the natives themselves on this subject, has led DEACON to consider the Ruan as belonging to the group of the Nalawan (Seniang), Nimangki Tiel (Lambumbu), Nelan (Lagalag), Nalauen (Big Nambas) and Nilan (Small Nambas). 184 432 f, 459 f. 2) DEACON 184 378-381. 3) 787 17 f, quoted also by SPEISER 789 239. 4) See DEACON 184 274 f, and 376 f.

is a small circle of flat upright stones. Of rank 10 LEGATT says: I could see no image, but was told that it was a long carved pole. On another island I was shown a small stone image as the symbol of this rank. When these objects are set up on the dancing ground, reed and ornamental shrubs are planted around them¹), but we are not told what plants these are. Not only can some grade names be identified with those of Seniāng, but the resemblance with Seniāng is particularly striking in that on Malekula, Seniāng is the only place in which stone circles were erected. Moreover, the setting up of a stone image, i.e. of a carved monolith, is found nowhere but in Seniāng²).

We know very little about the *inland region* of Malekula, but CHEESMAN, who ascended Mt. Villikoos, south-west of Mt. Penot—which is in DEACON's area of the red-stained mat skirt too, and where the Nimangki and Nalawan societies are found³)—reports: On the top of the ridge I saw a circle of upright lime stones "in such symmetrical order that I at first concluded that they had been carried there by the natives, some being slabs that looked as if they were squared by human agency." CHEESMAN who is not an anthropologist concluded "on nearer inspection" that "they had not arrived by human agency, but I do not know what can have been the means of producing them except by volcanic action just there where no other stones were to be found." "The bushmen call them seven piccaninnies of Villikoos, and have named them collectively Levitmos."⁴) IVENS, in criticising CHEESMAN's manuscript, has rightly pointed out that this stone circle is, of course, artificial, adding the important explanation that "Levitmos can be nothing else than "Levit", meaning 7, plus "tmas" or "tmos" (he thinks that CHEESMAN dropped a "t") meaning ghost or spirit"⁵) a word which in the form of "temes" we have repeatedly come across as the name of many sacred objects of the Nimangki, such as wooden images, monoliths, etc. These stone circles having been found also in the neighbouring Seniāng, there can be no doubt but that this inland region is related to South-West Bay, and CHEESMAN herself has furnished the best proof for this by stating: "I ... found out that there was a good deal of affinity between the language of that bush tribe and that of the South-West Bay natives. One was probably a dialect of the other"⁶).

Regarding the inland region of South Malekula, SOMMERVILLE⁷) records the information received from a coastal native who told him that during a war with the "man bush" his tribe had been in the inland. He said that the houses of the inland people "consisted of circular pits in the ground, paved at the bottom and sides with stones, and with a few boughs thrown over the top." Since this is the sole record of such a fact, and no similar

1) DEACON 184 376 f, LEGGATT 484 6-8, RIVERS 725 II 229. 2) See also DEACON 184 378. 3) Compare for this DEACON's map II, p. 11 in 184. 4) CHEESMAN 138 251 f, 239 206. 5) IVENS in CHEESMAN 139 209. 6) 138 252. 7) 786 365 quoted also by SPEISER 789 59.

occurrence is known regarding Malekula, its veracity is open to doubt.

Sacred Plants. The numerous facts mentioned have again shown the important part played by the sacred plants croton, cordyline terminalis, codiaeum variegatum, cycas, erythrina and coconut leaves in the rites of the secret societies. The sacred character of these plants is also evident from the name "naai limbu", by which croton is known in Seniang, meaning "the sacred tree" ¹⁾ or "bad wood" ²⁾. With regard to Seniang we may also add that during the seclusion of the candidates in the Nalawan society, certain food is taboo; should a man wish to break one of these taboos, he takes some leaves of the two "sacred" plants, the red croton nimbile and an unidentified shrub and rubs them between his hands, so that their juice falls in the forbidden food which he desires to eat. Cycas leaves are used as a sign of taboo. A stake, to which green cordyline leaves of the variety naari tamat are fastened, is planted in the ground as a token of peace. Also, a cycas palm and a broken bow are set up on the common battleground. After the incision the novices wear croton in their belts and in the procession which follows, the non-candidates carry croton branches the leaves of which they strew around ³⁾. The use of croton and cordyline in the Nalawan society has already been mentioned, but it may be added that croton leaves are fastened to a torch used in the ceremonies. The man who endows the candidate of the fourth Nalawan rank with his new name holds some croton branches in his hands; the puddings eaten on admission to rank 11 of the Nalawan are wrapped in croton leaves and cordyline leaves; on entering rank 17 of the Nalawan, the candidate receives a pig's tusk bracelet, which is handed to him by his introducer on a branch of the croton variety "nimbini". In a similar way the pig's tusk bracelet, with which a candidate to every Nimangki grade is invested, is wrapped in croton leaves, and at the introduction into the 9th Nimangki grade the introducer holds a spray of croton ⁴⁾.

We have not discussed the graded society of the women, called Lapas, as this is but an emanation of the graded society of the men, and because no stone-work is erected in this society. But sacred plants are also used: thus the croton variety naai nggeri "belonging to" the Lapas, is planted to warn men not to touch anything which belongs to the Lapas, and the same variety of croton is planted round the hut which is erected on the occasion of the entrance to the lowest Lapas rank ⁵⁾.

We have seen that the word naari, the general name for cordyline, reappears in the name of the Nimangki rank "Naari Mbangk" ⁶⁾. A pig offered to the ghosts during the funeral rites is struck with a croton branch and then wrapped in croton leaves. In the afterworld ghosts must eat excrements, but they may escape having to eat it by bringing with them

1) DEACON 184 4, 271, 385. 2) LAYARD 468 184. 3) DEACON 184 188 f, 224, 226, 248, 423. 4) DEACON 184 311, 315, 322 f, 327, 400, 404, 411, 419. 5) DEACON 184 483 f. 6) DEACON 184 274, 276.

from the land of the living the rotten stump of an erythrina tree (nendar, nandar according to LAYARD's spelling). For this reason a man will sometimes prepare a piece of erythrina tree against the time of his death¹⁾.

Mewun: After a birth the parents and the child must avoid coming into contact with a cycas else the child would die. The cycas (nemesmes) is the tree, which, according to a myth, bore the people of Melpmes in Mewun²⁾.

Leaves of croton are twined around the flute blown during the initiation rites in Lambumbu, the sound of which is considered to be the voice of the ghosts. Here too, cycas leaves are used as a taboo sign. In the magic to cause plenty of pigs, croton leaves are used. A Nimangki candidate receives a yam decorated with croton leaves, he himself holds a branch of dracaena in his hand and cordyline leaves are held together with the tether of the pigs used in the rites. At a grave a coconut decorated with croton leaves is set up upon a cane in a certain manner, and when important people are buried in the club house several crotons and a certain reed are planted round the front of the club house, so as to form a sort of enclosure³⁾.

Lagalag: In the secret society of the women, "Langambas", the women plant cordyline (naari) round their dancing ground. The objects used in magic against barrenness of a woman are wrapped up in croton leaves and burned beneath her bed. At the foot of a new drum, a stick decorated with cordyline or croton leaves is set up⁴⁾.

In Vao croton bushes are planted round the houses, in the gardens, and on the dancing ground⁵⁾, and a cycas leaf is used as a sign of interdiction to enter the house of a "chief"⁶⁾.

In Uripiv Island the men had branches of croton and hibiscus stuck into their belt during a feast⁷⁾.

In East Malekula, at a marriage the relatives of the bridegroom give dracaena leaves and arrows to the relatives of the bride as a token of peace⁸⁾.

Ambrym Island: On this island the arrival of a canoe driven out of its course is still remembered. This canoe which landed at Dip Point in 1888 contained people from Polynesia⁹⁾. But to-day, there remain no recognizable traces of recent Polynesian influence, either in the race or the culture of Ambrym; the prevailing element is Melanesian¹⁰⁾ as is also the language

1) DEACON 184 528, 556. 2) DEACON 184 236, 562. 3) DEACON 184 188, 259, 355, 357, 360, 364, 368, 568. 4) DEACON 184 232, 496, 510 f, for further information about the ritual uses of croton and cycas leaves see SPEISER 789 114, 350, 402, Pl. 100 fig. 2, 4, Pl. 104 fig. 2, HARRISSON 342 113. 5) SPEISER 790 60, Pl. 20, 791 459, 792 91, OLIVEAU 625 344. 6) OLIVEAU 624 346. 7) SOMMERVILLE 787 14. 8) SEBBELOW 766 278; regarding the use of dracaena leaves at a marriage recorded of "Malekula" see LEGGATT 482 705. 9) JOLY 419 366. 10) SPEISER 789 56, ROBERT-JOT 730 180.

which, however, contains some words similar to Polynesian ¹⁾). RIVERS calls the language aberrant Melanesian or archaic Austronesian ²⁾).

The Nimangki society is found again on Ambrym where it is called "Mangge", possessing all the characteristic features of the society ³⁾). In Sulol village there are 14 ranks, and in Lonwolwol village, near Dip Point, there are 7 ranks. The rank names used in both these villages are the same. Whereas only some of the grade names are identical to those of South and West Malekula, there is a marked similarity between the grade names of East Malekula and Ambrym ⁴⁾). It is in fact recognized by the people of Ambrym that the Mangge society was introduced into their country from Malekula ⁵⁾ with which Ambrym has close contact by trade and in its general culture ⁶⁾). The characteristic of the higher ranks is the setting up on the dancing ground of tree-fern images in human form, in which, it is believed, the ghost of the father's father comes to reside and care for the welfare of his descendant who is taking the new rank. For rank 12 a roughly dressed stone is set up and pigs are killed beside it ⁷⁾). Since the sources of information do not give many details, we do not know whether this is the only rank in which a monolith is erected. Monoliths erected to commemorate the killing of pigs are also mentioned by SPEISER, but with no indication of the rank in which this was done. SPEISER furnishes the additional information that the monoliths are not arranged here [on the borders of such imposing avenues as on Vao for instance ⁸⁾).

RIVERS informs us of a ceremony called Wor, in which "a heap of stones is made for a boy by his mother's brother, and various ceremonial functions are performed by the relatives of the boy's mother"; in another ceremony "an image is made by a man for his sister's son, in the belief that it will become the abode of the ghost of the maternal grandfather of the boy... pigs are killed in the ceremony" ⁹⁾). Owing to the matrilineal character of these rites, RIVERS has considered them as "the group of ceremonies believed to be indigenous" ¹⁰⁾). That there are remains of a former dual organization and matrilineal descent in Northern Ambrym, is well known ¹¹⁾), but I am of opinion that the erection of the heap of stones and the setting

1) RAY 705 47, GUNN 313 229, SPEISER 789 90, CODRINGTON 163 39. 2) RIVERS 725 11, 465, 476, 728 231. 3) PARKINSON 630 644, CODRINGTON 160 73, 84, SPEISER 789 450, 790 66, 160, 186, 382, 398, 791 463, 792 203 f, RIVERS 725 11 228, 728 230, DEACON 184 379, 434, 185 512. 4) DEACON 184 379, 274 f, SEEBELOW 766 274, RIVERS 728 230. 5) DEACON 184 379, 185 514, RIVERS 728 230, SPEISER 790 186. 6) SPEISER 790 185 f, 791 463, 792 202. 7) DEACON 185 514, LAYARD 468 204, 147, SPEISER 791 463, 792 205, RIVERS 728 230 etc. 8) 789 386 Pl. 87 fig. 1. In Ambrym there exists the Luan society recognized by the people as being identical with the Ruan of the east coast of Malekula, and said to have been introduced thence into Ambrym. Candidates are introduced at the funeral rites of one of its members. DEACON 184 429, 433 f. 9) RIVERS 728 231 f. 10) RIVERS 728 231. 11) DEACON 184 699, RIVERS 728 230 f.

up of the image are elements of the Mangge rites which have become combined with matrilineal features.

Near the club house there are sacrificial altars consisting of a round wall of coral stones about 3 feet high the interior of which is filled with earth. A few steps lead up to the altar. These altars correspond to the stone tables of Santo, Malekula, etc. The man killing the pigs dances upon them ¹⁾. SKINNER, after having discussed the stone tables of the other islands, says of Ambrym: "It is to be noted that where sufficiently large slabs are not available, the structure is built up solidly of smaller stones" ²⁾. Elsewhere, SPEISER says regarding these stone altars ³⁾: people of high social status erect an altar-like stone monument as a token of payment. This corresponds to information furnished by LAMB who says ⁴⁾: "there is no trace of worship or sacrifice connected with it. It is simply a monumental receipt that the chief has paid for his wives." From this it appears probable that these altar-like monuments have a double function.

Besides these monuments, table or dolmen-like altars also seem to exist on the island. Such a "Opfertisch für Schweineopfer" may at least be seen by the side of the men's house of which SPEISER gives a photograph ⁵⁾. It consists of a few supporting stones covered by a horizontal stone slab. LAYARD also indicates that stone platforms are frequent in Ambrym, but gives no further details ⁶⁾.

The houses of the lower ranks are surrounded by fences of wood and logs, but the houses of members of the higher ranks are surrounded by walls of stone and coral slabs ⁷⁾. Some of the stone walls surrounding the houses of the members of the highest rank (rank 14 "Mal"), according to DEACON ⁸⁾ measure as much as two feet high by one foot wide and one foot thick. According to SPEISER, the wall surrounding the house of a man of the rank "Mal" is the height of a man, but in the case of a lower grade it is only as high as a man's hip ⁹⁾.

Whereas at Dip Point and Olal the men's houses are not surrounded by a fence, this is the case in Port Vato. This fence consists either of wooden logs or of coral slabs ¹⁰⁾. There is no record of stone walls surrounding the villages, but the gardens are often surrounded by stone walls instead of fences ¹¹⁾.

After the death of a man of high rank his body is left in his hut and the skull is deposited later in the club house ¹²⁾. Both RIVERS and SPEISER also record that skulls were placed upon stone tables, and SPEISER specifies

1) SPEISER 789 386 Pl. 79 fig. 3, Pl. 87 fig. 1, ECKARDT 209 26, LAMB (453) in *Mon* 1905, Nr. 85, p. 158. 2) 783 237. 3) 789 295, again instancing the picture Pl. 87 fig. 1. 4) in *Mon* 1905, Nr. 85, p. 158. 5) 789 Pl. 16 fig. 1, 790 fig. 49. 6) 468 147. 7) SPEISER 789 117, Pl. 10 fig. 10, Pl. 16 fig. 4, Pl. 97 fig. 4, 790 186 Pl. 53, 792 205, 214, ELKINGTON 226 150 f, and figure, ROBERTJOY 730 181. 8) 185 514. 9) SPEISER 789 117 Pl. 16 fig. 4. 10) SPEISER 789 117, Pl. 17 fig. 3, Pl. 16 fig. 1, 790 fig. 29, fig. 49. 11) SPEISER 789 118, 146. 12) SPEISER 789 117, 307, COBRINGTON 160 288, DEACON 184 708, LAMB 453 118.

that this applies to the skulls of men of high social status¹⁾. Whether this is a reminiscence of the placing of skulls in a dolmen, as is done on Malekula, it is impossible to decide.

According to LAMB, on this island too, the skulls are made up with the hair of the deceased and with the face modelled in some compost or clay²⁾. Men of middle rank are buried at the periphery of the village in a common grave, which is surrounded by a stone wall about 4 feet high³⁾.

We must now discuss the exceedingly important discovery made by SUAS in Olal. There are two records of this discovery, but some of the details do not coincide; first the record given by SUAS himself⁴⁾ of the year 1917/18 and another record given by JOLY⁵⁾ of the year 1904. SUAS' excavation was made in 1899. Whether JOLY was eye-witness of SUAS' excavation, or whether his record is based upon the oral or written information of SUAS, we are not told. SUAS started digging with a view to building a road. At the depth of one metre he first came upon a stratum "de la terre meuble et sablonneuse"; then followed a stratum of three metres "de terre jaune... presque aussi dure que la pierre" and below this another stratum of 50 cm "de nouveau de la terre meuble". Beneath this, i.e. at the depth of 4.50 metres SUAS found "une pierre isolée au dessous de laquelle se trouvent d'autres pierres disposées en un cercle d'environ 0.80 m de diamètre ... J'enlève alors moi-même la grosse pierre qui forme couvercle et ... je vois un crâne humain ... Il est tellement pourri qu'il tombe en poussière à mesure que je dégage ... Tout ce que je puis recueillir dans cette tombe, c'est une dent, une molaire, mais une seule et quelques bouts de fémur et de tibia ... On rencontre deux autres tombes de même forme. Mais impossible d'en rien recueillir, les ossements sont encore plus pourris que dans la première tombe ... Ces trois tombes n'étaient espacées que de 1 mètre les unes des autres"⁶⁾. JOLY's record runs as follows⁷⁾: "Cependant à l'ouverture de ces tombes on reconnaissait nettement que ces morts avaient été enterrés dans la position accroupie. Or, ce mode d'ensevelissement ne se retrouve plus actuellement." Also SUAS was informed by the natives "nous autres nous n'avons jamais enterré un homme de cette manière là" and he adds "la race actuelle enterre les morts couchés horizontalement"⁸⁾. SUAS states that the natives volunteered the information that the people buried here made the pottery remains of which are still found on the island⁹⁾. But SUAS, who very frequently mentions the prehistoric potsherds found in great number on the surface of the ground on Ambrym Island, says clearly that these potsherds were not found in the grave itself. He says: "en creusant notre chemin au dessous de la couche de la terre jaune, nous n'avons pas trouvé trace de poterie"¹⁰⁾. But JOLY

1) RIVERS 725 II 429, SPEISER 789 356, 790 207, 797 176. 2) DEACON 184 708 from LAMB, see also SPEISER 789 356. 3) SPEISER 789 103, 307, Pl. 10 fig. 10, Pl. 79 fig. 2, 790 186. 4) 808 203-205. 5) 419 365 f. 6) SUAS 808 203-205. 7) 419 365. 8) 808 204 f. 9) SUAS 808 204, JOLY 419 365 f. 10) 808 205.

on the other hand informs us that: "Dans ces sépultures se trouvaient des fragments de poterie ornés de dessins." Since SPEISER also found a potsherd whilst excavating at Olal¹⁾, JOLY's information that the potsherds were found deeper in the earth is probably more reliable. SPEISER, who later made an excavation at the same spot, came across the following stratigraphy: "The first stratum was humus, then followed loose yellow volcanic sand and then hard volcanic tuff. In this I found no artifacts at all but only branches and plants burned to charcoal. It seems that these remains of charcoal are due to a volcanic eruption by which glowing blocks of lava fell upon the vegetation, whereupon the whole was covered by volcanic ashes"²⁾. That it was as a result of a volcanic eruption that this dolmen was covered is also the opinion of SUAS and JOLY³⁾, and explains the great depth at which this dolmen was found. We shall revert later to this discovery which, it will be seen, is of the utmost importance for the understanding of the cultural connections.

Sacred Plants. Cycas leaves are the badge of the highest Mangge ranks and are also used in sorcery⁴⁾. LAMB records the platform burial of a chief; under the platform "the ground was carpeted with coloured croton leaves"⁵⁾. Behind the men's house a big croton bush was growing and croton leaves were also worn at feasts⁶⁾.

Epi: The inhabitants of Epi Island are typical Melanesians and are considered to be the darkest skinned people of the New Hebrides. Their hair is frizzy and, according to ECKARDT, semitic features can also be recognized⁷⁾. The language, however, shows Polynesian influences⁸⁾.

On Epi, at least in the western part of the island, we once more find the Nimangkî society, here called "Megi", with all its characteristic elements, although to-day it plays a very restricted part and has almost died out⁹⁾. The Megi was introduced into Epi from Lamman, a little island off the north-east point of Epi; and it came to Lamman from Malekula¹⁰⁾. DEACON was unable to obtain any reliable information regarding the definite number of ranks. By comparing the rank names with those of the other islands, it is apparent that they strongly resemble those of Seniang, South Malekula and East Malekula¹¹⁾. At the ceremony of rise in rank, pigs were killed. Trees called brutya, were planted in a circle and to each tree a pig was fastened. Tree-fern images of human form called tavuru, which correspond to the temes of Malekula, were set up, but no stones

1) SPEISER 789 93. 2) SPEISER 789 93. 3) SUAS 808 204 f, JOLY 419 366.
4) DEACON 184 271, SPEISER 789 349, 290 350, RIVERS 725 11 228. 5) LAMB 453 118
quoted by SPEISER 789 307 and DEACON 184 708. 6) SPEISER 789 402, 790 fig. 51.
7) SPEISER 789 60, 790 202, 797 134, ECKARDT 209 48. 8) SPEISER 789 90, GUNN
313 229. 9) DEACON 185 505, SPEISER 789 382, 450. 10) DEACON 185 506.
11) For this compare the following lists of rank names: DEACON 185 504, 184 274 f,
374 f, 378-381, LAYARD 468 151 f, SEBBELOW 766 274.

were set up round or in front of the images, nor were stone circles, such as in Malekula, ever set up around the image ¹⁾.

In Lamén, Western Epi, there are stone tables similar to those of South Malekula and also called "wota" as the stone tables of Malo ²⁾. Upon the horizontal slabs, stone balls of the size of a fist were lying and were said to have been used for smashing the heads of the sacrificial pigs. It is not quite clear whether these stones are artifacts or of natural shape. They are certainly similar to the "stone child" of Seniang and the analogous stones of Maevo; in Seniang also they were used, though on rare occasions for killing the pigs and they remind one of the Lambumbu practice of killing the pigs by hitting them on the head with a stone. The ground upon which these stone tables were standing in Lamén was surrounded by a wall of coral slabs planted vertically into the ground.

In the north-east district of Epi, "Nikaura", carved images and stone tables also occur, but they are very debased. The images here are not made locally but imported ³⁾.

In Lamén each family compound is surrounded by stone walls and reed fences⁴⁾.

Sacred Plants. "Chiefs", that is men of Mal or Meleun rank, can lay a taboo by means of a frond of cycas (mamal) and a branch of a croton with large green leaves (mbumbwa), which they bind together and put on the object. When a "chief" died he was placed on the ground before burial. All the people cried over him. As each passed by he stuck a croton branch in the ground near the body. This expressed the idea that the chief would fight no more, that he was now, for ever taboo ⁵⁾.

The Southern New Hebrides: Turning to the islands south of Epi we come to an area of which the culture contact with the northern islands has been strongly overlaid by recent Polynesian influences which strongly modified the language, customs, mythology, social organization and the race of these islands. Although also in the northern islands some Polynesian influence occurs more or less sporadically, it was nevertheless only in the southern islands that this Polynesian influence was really decisive.

From Tongoa Island to Fate Island this influence has caused great uniformity in culture. These islands have Polynesian-influenced languages understood by the inhabitants of all these islands ⁶⁾. Although racially Polynesian influences exist, they are nevertheless not very strong ⁷⁾. To what extent their mythology was modified by the Polynesians, we shall

1) DEACON 185 504 f, SPEISER 793 76. 2) SPEISER 789 386 Pl 104 fig. 4, CAPELL 121 64, SKINNER 783 236. 3) CAPELL 121 65. 4) SPEISER 789 104. 5) DEACON 185 505. 6) CAPELL 121 68, 72, SOMMERVILLE 786 364, RAY 699 409, 705 47, 50, SPEISER 789 90, 91, 56, 267, 793 27, CORRINGTON 163 31 f, 162 265, FRIEDERICI 269 15, ERSKINE 231 333. 7) SOMMERVILLE 786 364, ERSKINE 231 333, ROBERTSON 731 1, SPEISER 789 56, DOUCERÉ 201 6 f.

see later. Traditions of the arrival of Polynesian canoes driven out of their course are frequent¹). In the social organization, Polynesian influence is evident from the existence of hereditary chieftainship which, apart from Big Nambas, is unknown in the Northern New Hebrides²).

The connection with the northern islands appears particularly in the few traces of the graded societies which are to be found in these islands. Of *Tongoa* Island BAKER says³): pigs were formerly killed at grade changes. The island is now christianised and ceremonies no longer occur. Regarding the *Shepherd Islands*, CODRINGTON records⁴) that the Suqe seems formerly to have existed here. BÄSSLER⁵) records the existence of a graded society on *Mele* Island near Fate, but does not give its name. Progression in ranks is acquired by pig killing, and the division of fires is very strict. BÄSSLER gives the names of six ranks, but points out that there are many more; his text is, however, somewhat vague regarding this point. If we compare these rank-names with those of the other regions with which we have already dealt, we find that some of them are similar, and others completely identical with those of several regions of Malekula. Since BÄSSLER does not mention all the existing rank-names, it is difficult to say definitely with which region of Malekula the resemblance is greatest. Judging from the rank-names which he does give, the strongest resemblance seems to be with Port Sandwich, Senbarei and Ambrym. It is remarkable that they agree less with Epi than with these regions of Malekula. There is also some resemblance with Seniang, South Malekula and the Maskelyne Islands, but this is less marked than that with East Malekula. Fate thus represents the most southern point to which the Suqe has extended⁶).

SOMMERVILLE⁷) gives the following record of *Man* Island near Fate: "Here I was shown by the natives a large stone lying in the field, on which was crudely carved an undoubted representation of the sun and of the moon; the former circular, about 18 inches in diameter and the latter an ogee cut square at the top, also about 18 inches long... The natives said that they represented the sun and moon, and that "ole fella man e makum"; they certainly appeared to be very ancient. In the same field was another stone, set up like a small gravestone; and, as it leaned over, its carved face had not become so weather-worn as that of the other; on it was what I take to represent a skull... These stones were of a hard volcanic nature." The dimensions of the first stone mentioned make it probable that it was a natural rock bearing petroglyphs, but the second stone must be a carved monolith. I am convinced that this carved monolith is related to the graded society, although none of the sources of information contains any indication to this effect. Only in Seniang and the Maskelyne Islands we have found

1) See SOMMERVILLE 786 364, 391, ERSKINE 231 333, HAGEN 332 215, SPEISER 789 56, 790 286, 793 59, 216, RAY 705 51, BOURGE 88 228, JOLY 419 356 f. 2) See CODRINGTON 162 290, CAPELL 121 72, etc. etc. 3) 41 118. 4) Quoted by SPEISER 789 382. 5) 35 204 f. 6) See also SPEISER 789 161, 383, 793 76. 7) 787 9 f, quoted also by SPEISER 789 360.

carved monoliths in connection with the graded society. Although the grade-names point rather to affinity with East Malekula, these monoliths would seem to be related to the south-west coast of Malekula. But as we have seen, no definite opinion can be expressed regarding the derivation of the grade-names in Fate. Regarding the sun and moon depicted on the rock, we shall discuss this problem at greater length later on ¹⁾.

On the coast of the island of *Fate*, stones are set up to denote the enemies killed ²⁾.

In Leleppa, on *Fate*, SPEISER discovered two caverns. In the southern cavern "there were stone heaps and low stone walls... A few ovens of recent date were found at different points. The thick strokes shown in the drawing (Pl. 11 fig. 9) mark long rows of flat circular depressions 2-4 cm. in diameter and about $\frac{1}{2}$ cm deep at a height which a tall man could reach with his hand. These depressions are certainly artificial." The natives were unable to give any information about these marks ³⁾. Ovens were found also in the northern cavern and a stone wall ran across the entrance. SPEISER who made excavations in this cavern, found at a depth of 8 inches a few ovens, some broken shells, and one potsherd ⁴⁾.

As pointed out in the introduction to this work, not every stone-work is necessarily megalithic. When discussing the problem of prehistoric potsherds we shall see that they belong to the *Ambat*, i.e. the megalithic immigrants of the New Hebrides. Since in one of the caverns a prehistoric potsherd was found, it would not be unreasonable to suppose that the pot-using people who inhabited the cavern were also the creators of the stone-work found here. But there is no direct proof in support of this supposition, and it must not be overlooked that ovens of recent date were also found. The stone-work may therefore well be of recent origin. No conclusion can yet be reached regarding the culture to which the rock carvings belong. Perhaps they point to some connection with New Caledonia as is the case for the petroglyphs of Erromonga and Aneityum. There are, moreover, other indications of the connection of the Southern New Hebrides with New Caledonia.

On Mele Island, near *Fate*, the villages are surrounded by walls built of loosely heaped up stones and the very narrow paths are bordered on either side by stone walls or wooden fences ⁵⁾. ERSKINE, speaking of *Fate*, mentions "a village situated on an island... and protected to seaward by a coral wall" ⁶⁾.

Regarding the burial of a chief it is recorded that on *Fate* a stone is set up at the head of the grave ⁷⁾. Whether such a stone was of the monolith type we are not told.

1) SPEISER in his table 793 226 f. under "stone platform" places a note of interrogation against *Fate*. 2) SOMMERVILLE 787 9, SPEISER 789 418. 3) SPEISER 789 Pl. 11 fig. 5, 790 285. 4) SPEISER 789 93 f. 5) BÄSSLER 35 207, 36 366. 6) 231 323. 7) ROBERTSON 731 727.

Sacred Plants. Very little is known about the use of sacred plants. On one side of the dancing ground, where upright gongs are found, casuarina trees are planted in a row ¹⁾ and BRENCHELEY says of Fate Island ²⁾ "There were several beautiful crotons... green, yellow and red", but he says nothing about their use.

Having reached the extreme point to which the graded societies have spread, we should like to draw attention to the remarkable uniformity of the rites and the symbols used in all these societies. In the lower ranks in many cases wooden stakes or images were set up, some of which were of erythrina, croton, cycas wood, etc.; in the higher grades stone-work was erected. The cult of many of these secret societies was closely associated with the cult of the dead. It is significant in this connection to note that the carved wooden images as well as the monoliths of the Suqe, Nimangki and the other societies, in the majority of cases represent the spirits of the dead ancestors. This is borne out by the fact that these monuments are called temes, demits, tamate, or by a name derived from these words which all mean ghost ³⁾. With regard to Seniang DEACON says ⁴⁾: "When a man sets up a temes at entrance to a grade, there is the definite idea present that after his death, his own spirit will enter and sojourn herein. While he is still alive the image is regarded as being occupied by the spirit of some deceased member of the grades ... In addition to this general occupation by spirits of deceased members, there is a vague idea that the spirit of the original founder of the grade dwells within these temes ... It is believed in some sense to be the guardian of the grade." With regard to Atchin, LAYARD has pointed out that the wooden images and stones erected in the Nimangki represent the ancestors. His remark agrees almost exactly with that of DEACON. LAYARD says ⁵⁾: "The monolith actually represented, and was deemed to be inhabited by the ghosts of all those ancestors who had previously performed the rite, and after death, the new sacrificer himself". In the Small Islands and Malekula many of the songs of the Nimangki dances commemorate the deeds of the ancestors, and one of the most important dances, the "Na-leng", is in fact none other than a dramatization of the Malekulan version of the journey of the dead, as LAYARD has shown ⁶⁾.

On *Erromonga* Island the Melanesian character of the race and language has been preserved to a greater degree than on the other islands. But here too, Polynesian influences have modified, in some way, the race, the language and the general culture ⁷⁾. The graded society is in fact non-

1) SPEISER 789 386 from GOODENOUGH 296 290. 2) 92 219. 3) See CORLETTE 173 VI 51, DEACON 184 279, ELKINGTON 226 155-157. 4) 184 281. 5) 470 346. 6) LAYARD 470 346. 7) CAPELL 121 74, ROBERTSON 731 22-26, 362, 364, RAY 705 47, HUMPHREYS 398 124, 132 f, JOLY 419, 356, SPEISER 789 56, 62, 90, 797 130, GUNN 313 229, etc.

existent, and hereditary chieftainship due to Polynesian influence, is found ¹⁾).

BRENCHLEY, who, on his cruise, came near to this island reports ²⁾: "The commodore could distinguish with his telescope (i.e. from the ship) that the village was regularly fortified all round." Indefinite as this information may be, it seems to indicate that the villages were surrounded by stone walls. I know of no fuller information on this subject.

With regard to the building of houses on Erromonga, HUMPHREYS records ³⁾: "Ground is first raised about a foot above the surrounding level in rectangular form and somewhat larger than the projected floor space of the house, and when nicely smoothed over and solidly packed down, it is ready for the superstructure."

Discussing the disposal of the dead, TURNER and BRENCHLEY record ⁴⁾ that at the head and foot of the grave, stakes were set into the ground. But ECKARDT ⁵⁾ records: "The Erromongans mark their graves by two vertical wooden posts or stone pillars." Stone pillars are, however, not mentioned by any other author.

Sacred Plants. It is significant that we hear very little about the use of sacred plants. ROBERTSON records only that crotons and dracaenas were growing, and that the fence of the camp of a chief was made of dracaenas ⁶⁾).

On Erromonga, rock paintings representing hands and feet but no carvings were found; but at the top of the cave where they were discovered, there were also a few circular impressions ⁷⁾. Whether these belong to the same group as the petroglyphs already mentioned and those of New Caledonia is uncertain. That there are connections with the islands to the south, is evident from the frequent records of reciprocal trading relations between Erromonga, Tanna and Aniwa ⁸⁾).

On Tanna Island the Melanesian character of the race and language is still well preserved, although here too, they show Polynesian influences ⁹⁾).

There is complete absence of the graded society and everything connected with it ¹⁰⁾. Hereditary chieftainship occurs here again ¹¹⁾. HUMPHREYS says regarding Tanna: "There is no megalithic work whatever... nor is there any recollection that any ever existed" ¹²⁾. BRENCHLEY records of Tanna: "Here and there in the woods are certain stones for which they have a species of veneration" ¹³⁾, but he gives no details at all, so that we

1) HUMPHREYS 398 132 f, BRENCHLEY 92 391, ROBERTSON 731 391, SPEISER 789 388, 791 464. 2) 92 294. 3) 398 155, fig. p. 157. 4) TURNER 901 495 quoted by SPEISER 789 310, BRENCHLEY 92 320. 5) 209 24. 6) ROBERTSON 731 12, 295. 7) HUMPHREYS 398 175-177. 8) HUMPHREYS 398 3, 42, 68 f, 141, 164, 169, 187, ROBERTSON 731 9, 401, ROBERTJOT 730 171. 9) HUMPHREYS 398 2-4, 88, 101, SPEISER 789 62 f, 90, 790 275, 792 270, 793 216, 797 134, 801 398 GRAY 303 230, 646, 304 127, 305 229, CAPELL 121 77, RAY 696 147, etc. etc. 10) HUMPHREYS 398 84, SPEISER 790 275, 792 270. 11) HUMPHREYS 398 36, BRENCHLEY 92 210, SPEISER 789 339, 790 275, 792 270, CAPELL 121 78. 12) 398 66, 101. 13) 92 209.

do not know whether he means megaliths or not. Buxton¹⁾ discovered on Tanna "two large masses of rock which have been roughly squared and faced; ... In one of the pieces of rock is a circular basin, about 26 inches in diameter, and 8 inches deep; the sides are sharply cut and there were two overflows in the rim; and a few small pit-shaped depressions around the margin. In the other rock is a rectangular excavation about 26 by 9 inches by 6 or 7 inches deep. Both cavities held water... but the vegetation round the rocks themselves was not trampled, and it appeared... that they are not visited or used. I was unable to learn the possible use of the cavities, or obtain information about their history."

The fences round the gardens are built of stones, logs, bamboo, reeds, or of a combination of these²⁾.

Regarding the use of sacred plants we are only told that after the interment and the filling in of the grave it is usually marked with dracaenas or other plants³⁾. *Evodia hortensis* and croton are worn in the armlets, and *evodia* is grown⁴⁾.

In the Southern New Hebrides, the absence of the graded societies goes hand in hand with the scarcity or complete absence of megalithic stone-work and use of sacred plants. The cultural contact with New Caledonia is clearly evident from the well known nephrit pendants (other stones also are used) of Tanna. The biconical perforation, known in New Caledonia only, and the nephrit stone which exists only in New Caledonia, are sufficient proof that these pendants must have come originally from New Caledonia, as Speiser and de la Rüe have pointed out⁵⁾. The use of the throwing cord points also to New Caledonia⁶⁾. Trading relations existed between Tanna and Aneityum to the south from where the people of Tanna brought a special red earth for face painting⁷⁾. A further proof of the connection with New Caledonia lies in the fact that the drum and the pig, which are found in all the other New Hebrides, is "nur verkümmert vertreten" in Tanna⁸⁾ and that both of them are completely absent in New Caledonia.

The inhabitants of the little island *Futuna* racially have strong Melanesian characteristics, but their language is Polynesian with but few Melanesian elements⁹⁾. Traditions of Polynesian immigration are frequent on this island¹⁰⁾. With regard to the social organization it is worthy to note that matrilineal descent prevails; even chieftainship devolves upon the late chief's sister's son¹¹⁾.

1) 118 57 fig 2. 2) HUMPHREYS 398 64. 3) HUMPHREYS 398 91. 4) FORSTER 259 276, FINSCH 236 345. 5) SPEISER 789 184, 790 277, 793 38 f, 52, 55, 68, 208, 797 129, DE LA RÜE 750 249-259. 6) SPEISER 789 208, 793 42, 53. 7) BRENCHELEY 92 207, HUMPHREYS 398 40. 8) SPEISER 793 209. 9) HUMPHREYS 398 114 f, 118 f, 120, 122, GRÜNDEMANN 312 367 f, CAPELL 121 72, ROBERTSON 731 1, SPEISER 789 56, 63, 90, 797 128, RAY 705 50, 696 147, ECKARDT 209 13, COBRINGTON 162 289, 163 31 etc. etc. 10) SPEISER 789 57, GRÜNDEMANN 312 367, GILL 286 177 f. 11) HUMPHREYS 398 114, CAPELL 121 78 f.

According to GUNN, the altars of the Vui were surrounded by low stone walls¹⁾ and at the place where the Polynesian Amoshikishiki (for this character see the discussion on Mythological Evidence) fished up the island Futuna, a row of stones represents his broken fishing line²⁾. RAY records the word "bae" or "bai" i.e. "stone fence" for Futuna and Tanna³⁾ without giving more detailed information on the subject. This word probably means the stone fences round the gardens such as we have come across in Tanna.

Sacred Plants. With regard to the use of sacred plants in Futuna, we are told that at a feast the men wear a bright coloured dracaena⁴⁾, and Maisiki, who, according to their myth, came from Tonga to Futuna in a large canoe with men, women and children, wore a dracaena terminalis in his hair⁵⁾. SPEISER relates that in the southern islands no ritual use of the cycas palm is known⁶⁾. This fact, coinciding with the absence of the Suqe in the southern islands, is of the utmost significance and gives additional strength to the conclusion that there is a genetic connection between the use of all the sacred plants enumerated, including the cycas palm, and the graded societies.

On *Aneityum*, the most southern island of the New Hebrides, the Melanesian character is still well preserved in the race⁷⁾ in spite of the numerous immigrations to this island⁸⁾. The hereditary chieftainship descends in the patrilineal line⁹⁾. The use of the throwing cord points again to New Caledonia¹⁰⁾ and here, as in New Caledonia, petroglyphs are found on large unhewn rocks¹¹⁾.

Although it would be tempting to continue our study in New Caledonia, we must now turn to those sources from which alone we can gain a better understanding of the history of the megalithic culture of the New Hebrides, i.e. the myths.

Mythological evidence.

Owing to the excellent field-work done by numerous students in the New Hebrides, our knowledge of the myths of this region is very wide. There are very few regions in Melanesia where the myths reveal so much regarding the problem of megaliths as they do in the New Hebrides. The New Hebrides therefore in this respect also represent an excellent starting point for the investigation of the history of the megalithic culture¹²⁾.

The myth which is known in all the Banks Islands is that of the culture

1) 313 195 quoted also by SPEISER 789 364. 2) GUNN 313 217 quoted also by SPEISER 789 366. 3) 705 53 Note 3. 4) GUNN 313 193 quoted by HUMPHREYS 398 117. 5) GRL 286 177 f. 6) 789 351. 7) ROBERTJOT 730 167, CAPELL 121 78. 8) GUNN 313 190, SPEISER 789 57, CAPELL 121 80. 9) CAPELL 121 78, HUMPHREYS 398 106, LAWRIE 467 710. 10) SPEISER 789 209. 11) INGLIS 402 30, 33, LAWRIE 467 712, GUNN 313 228, SPEISER 789 345 f, 361, Pl. 107 fig. 1, 3, 797 129. 12) We have very little information with regard to the myths of the Torres Islands. The few which are of interest for our problem will be discussed later, when their connection with the analogous myths of the other New Hebrides has been elucidated.

bringer Qat. The traditions vary in the different islands, but all agree that Qat was born in Vanua Lava and that finally he departed from the world. Since this myth is of extreme importance for our problem, I shall here give a brief account of it. A direct association between Qat and stone-work does not appear in the myths of the Banks Islands, apart from the fact that Qat's mother was a stone. It must further be mentioned that the tree which Qat planted to save himself from the ogre, was a *casuarina* (aru), and the plant out of which Qat created the first human being, was a *dracaena*. The importance of these plants in the ritual of the Suqe, their connection with stone-work, etc. have led us to the conclusion that the ritual use of these plants belongs to the culture of the stone-using immigrants. The real importance of the Qat myths will only appear when it becomes evident that they are identical with the myths of the Ambat of Malekula, the megalithic character of which cannot be doubted. Furthermore, it will be shown in the course of this work that the themes of the Qat-Ambat myths have a much wider extension in Melanesia than is generally admitted¹). Furthermore, it will appear in the course of this study that the distribution of these myths in Melanesia is also in favour of their connection with the stone-using immigrants. Finally, a fact of great importance is that the Qat myths correspond to those of the Polynesian Maui and Tagaro, a fact which has been pointed out by several writers²). Since the Qat myths are related with comparatively few variants in all the Banks Islands, I have compiled the following data from the information given in the different islands.

Qat, who was born in Vanua Lava, is believed to have made things and fixed the natural condition of things in the world. The people of the place where he was born in Vanua Lava, Alo Sepere, claim him as their ancestor. The name of Qat's mother is Iro Qatgoro (or Iro Ul), and this mother was a stone that burst asunder and brought him forth. He had no father. He immediately grew up and talked. He, who is generally regarded as the eldest, had brothers also. The first after him was Tangaro Gilagilala, Tangaro the Wise, the second was Tangaro Loloqong, Tangaro the Fool, who was ignorant of everything; the others were Tangaro Siria, Tangaro Nolas, etc. eleven of them, all Tangaro. The names of the last nine were made up of the names of the leaves of trees and plants added to Tangaro, which is no doubt the same as the Tagaro of the New Hebrides and the Tangaro of the Polynesians. These all grew up as soon as they were born, and they took up their abode in the village Alo Sepere. There Qat began to make things, men, pigs, trees, rocks, but he still knew not how to make night, and the daytime was always light. Then his brothers asked him to make night. Qat heard that there was night at Vava, in the Torres Islands; so in his canoe he sailed over to Vava, where he bought night, qong, from I Qong, Night.

1) Thus COOMBE says regarding Loh Island: "It will afford us the last glimpse of Qat, who goes no farther afield than this from his home in the Banks Islands". 170 146. 2) See for instance CODRINGTON 162 268, IVENS 405 158.

who lived there. Others say that he paddled to the foot of the sky, to buy night from Night. Qat returned to his brothers with the knowledge of night and with birds to give notice of the time of the return of light. Then he let go the night. "Qat, Qat", cried his brothers, "what is this, shall we die?" "Shut your eyes" said he "this is it, go to sleep". When night had lasted long enough, the birds began to twitter; Qat took a piece of red obsidian and cut the night with it, the light shone forth again, and Qat's brothers awoke¹).

According to the story as told in Mota, Qat made men and pigs to walk alike on two feet, but on his brothers remonstrating with him, he beat down the pigs to go on all fours and made men walk upright. Man was made of clay, but according to the Gaua version of the story, Qat made men by cutting wood of dracaena trees into shape. The first woman made by Qat was Iro Vilgale. Qat's wife was Iro Lei. His brothers, who had no wives of their own, envied him the possession of the beautiful Iro Lei, as well as of his excellent canoe, and were always conspiring to get possession of both. Qat proposed to his brothers that they should cut canoes for themselves, and they began to work. Qat cut down a large tree and worked secretly every day, but made no progress in his work; every day when he returned to work he found the wood that he had chopped away replaced, and the tree made solid again. One evening he lay down to watch, making himself small, and covering himself with a large chip which he drew away from the rest and hid. Presently he saw a little old man with very long white hair creep out of the ground and begin to replace the chips, each in the place from which it had been cut. But there was one defective place to which the chip belonged which Qat had hidden, and the old man began to search for it. When he saw it and advanced to take it, Qat leapt up from under it, lifting up his shell axe to cut him down. But Marawa, the spider, for this was he, entreated Qat not to kill him, promising Qat to make his canoe. He worked at it and soon finished it. When all the canoes were finished, Qat bade his brothers launch their own, and as each was launched he lifted his hand, and one by one they sank. Then Qat and Marawa appeared in the one that they had made, to the astonishment of the brothers, who had not known that Qat had even begun to work. After this his brothers tried with many deceits to destroy Qat, so that they might possess themselves of his wife and his canoe. One day they took him to the hole of a land crab under a stone which they had already prepared by digging under it so that it was ready to topple over upon him. Qat crawled into the hole and began to dig for the crab; his brothers tipped over the stone upon him, and, thinking him crushed to death, ran off to seize Iro Lei and the canoe. But Qat called on Marawa and by the time his brothers reached the village, there was Qat to their astonishment sitting by the side of his wife. On another occasion they cut half through the bough of a fruit tree, and persuaded Qat

1) COBBINGTON 160 154-157, 162 267-271, COOMBE 170 106, 146 f.

to go out for the nuts. When he fell as the branch broke, and as they thought was killed, Marawa again saved him; and when they ran to seize his wife they found him sitting by her side. Then they decided to entrap him while snaring birds. Qat mounted into his nutmeg tree, and as soon as he was busy with his snares his brothers said: "My nutmeg, swell" and the nutmeg tree instantly grew so large in the trunk that Qat's arms could never clasp it, and all its boughs and branches equally swelled out, making it impossible for Qat to descend. His brothers ran into the village, seized and carried off his wife and in his canoe they paddled off at once. Marawa, the Spider, came and sent up his exceedingly long hair to Qat, who descended by it and ran into his village¹). Then he stowed all his things and his food in a coconutshell bottle, made himself small and took his seat within it and bade his mother throw it into the sea. So Qat floated on and on till he came to the shore of Maevo. His brothers went via Gaua and Meralava to Maevo, and when they came to the shore, they saw Qat sitting there. Qat hewed the canoe to pieces, after which he made friends with them again. Another remarkable series of adventures were Qat's encounters with the ogre Qasavara. One day the brothers went to bathe, and found floating down the stream a fruit of the Tahitian chestnut, each taking a bit of it. Qat sent them to get some more, and following up the stream down which this fruit had floated they came upon the tree. They climbed upon it to gather the chestnuts, and Tangaro the Fool dropped one upon the house of Qasavara, over which the branches hung. Out came the ogre in a rage, seized and killed the brothers, and put them in his foodchest. Qat waited five days, then took his bows and arrows and shell hatchet and went in search. He found the tree and brought Qasavara out by dropping a nut on his house. They fought and Qat killed Qasavara, after which he revived his brothers from their bones. Another adventure is thus narrated. Qasavara invited Qat and his brothers to his village, and made a fire in his oven for them. When it was evening he told them that they were to sleep in his gamal. But knowing that they would be killed, Qat rapped asunder one of the rafters of the gamal, and they all got inside and slept. In the night Qasavara came to kill them but not finding them he went back disappointed. The next day when Qasavara asked them where they had slept, Tangaro the Fool revealed their secret. So in the following night Qat opened a post in which they slept, so that Qasavara was unable to find them in this night either; but next morning Tangaro the Fool confessed again where they had slept. Now the ogre decided to kill them at a feast. Qat made his preparations to save his brothers by planting a casuarina tree (aru) and instructed the brothers what they were to do. Whilst the feast was going on they should offer to go to fetch salt water, and on their way should climb up into the casuarina tree. Two by two they went for water, smashed the vessels and climbed

1) Another version makes the spider Marawa spin a web-ladder for Qat to descend.

into the tree, till Qat alone was left. He fought with Qasavara and leaping to the side of the oven, took up all the food from within it. Then he ran away and climbed to his brothers on the tree, Qasavara climbing after him. When Qasavara climbed close to them, Qat cried out "My casuarina lengthen!" So the casuarina lengthened between Qat's party and Qasavara. So it went on till the tree top reached the sky. Then said Qat, "Bend down my casuarina" and the tree bent down to Venua Lava, and they all got down to the ground there, Qat being the last to descend. Then Qat held fast to the top of the tree and when Qasavara reached the end, Qat let go the tip of the casuarina and the tree sprang back and shot off Qasavara, so that he was killed.

It was from Gaua that the story makes Qat take his departure from the world. Where in the centre of that island there is now a great lake, there was formerly a plain covered with forest. Qat cut himself a big canoe there out of one of the largest trees. While making it he was often ridiculed by his brothers and asked how he would ever get so large a canoe to the sea. He answered always that they would see. When the canoe was finished, he took in it his wife and his brothers, collected the living creatures of the island and shut himself with them inside the canoe. Then came a deluge of rain; the great hollow of the island became full of water, which burst through the surrounding hills. The canoe tore a channel for itself out into the sea and disappeared. The people believed that the best of everything was taken from the islands when Qat so left them, and they looked forward to his return. It is certain that the story is older than any knowledge of Noah's ark among the people, says CODRINGTON, and from the fact that in many other myths of Melanesia this theme is always found to be associated with the analogous culture heroes, we must conclude that CODRINGTON's opinion is right. It might further be added that when Bishop PATTERSON first visited Gaua Island, he was taken by the natives to be Qat redivivus ¹⁾.

In Maevo Qat is not unknown ²⁾, but Tagaro takes his place. His companion was Suqematua who in all things was contrary to him, corresponding thus to Tangaro-loloqong of the Banks Islands, the stupid brother of Qat. Tagaro wanted everything to be good, Suqematua would have all things bad. When Tagaro made things, pigs, fruit-trees and men for instance, Suqematua tossed them up into the air. Although Tagaro lived on the island he was not born there. He made his canoe, his gamal and his food. His life was full of wonders. His coconuts increased as he ate them, and dry nuts out of which he scooped the meat filled up again. Finally Tagaro became angry because someone stole his pig. So he went off eastward

1) CODRINGTON 160 157-167, 162 268 f, 271-274, COOMBE 170 65-67, 85, 96-100, 107-111, 125-129, ECKARDT 209 377. 2) See CODRINGTON 160 398-402.

from the east coast of the island in his canoe, taking with him the best of everything, and put out the fire but threw back a fire stick¹).

According to a Maevo story, Tagaro made the sea which in olden times was quite small like a pool. In this pool which was at the back of Tagaro's house there were fish, and Tagaro had built a stone wall round it. In his absence his two children, whom he had forbidden to go to the back of the house, went and saw the pool of salt-water with many fish, and one of the boys shot at one and hit it. And as he ran to catch hold of the fish he threw down a stone of the wall, and then the water ran out, thus forming the sea²).

COOMBE records the following myth of Maevo which, although there is no mention of any direct association with Tagaro or Qat, nevertheless contains elements belonging to the same cycle of myths. It runs as follows: There were a father and a mother who had nine children. Once the children walked about following a river and gathering chestnuts. Then they bathed on the sandy beach, after which their mother counted them, for she saw that there were not nine, but ten. The tenth child was very beautiful, and was not a son of hers. He was fair and his hair was yellow. This beautiful child had come forth from a rock. Then the man got a net, made stealthily for the rock out of which the child had come and caught the child who became their son. But once the other brothers scolded him, so he ran to the beach, dived and returned to his home, the rock³).

The following are the resemblances with the Qat myth: There is also a group of brothers; here their number is ten. One of these children is very beautiful and his skin is fair and his hair is yellow. This point is very important. As in the Qat myth the brothers follow a river to gather chestnuts. The beautiful child comes forth from a rock, like Qat, whose mother was a stone, which bursts and brings him forth. Finally the beautiful child goes away like Qat and Tagaro. The resemblance of this tenth child with Qat and his brothers is so evident that it is apparently Qat himself. Although light skin was not explicitly mentioned for Qat, it is highly probable from this analogy that he had light skin. Besides, we have seen that when Bishop PATTESON first came to Gaua he was taken by some of the natives to be Qat. The same identification of the light-skinned stone-using immigrants with the first Europeans will be found in many other analogous cases in the course of this work. There is still another argument in favour of the opinion that Qat was light-skinned. CODRINGTON records the following myth of the ogre Taso of Maevo⁴): Taso was a man-eater. The sister of Qat was pregnant and Taso killed her, but did not eat her because she was pregnant. Her two infants were alive, and as the mother rotted, it left them free. They came to a place where there was a sow with

1) CODRINGTON 160 168, 369 f, 162 292. 2) CODRINGTON 160 370; the same myth is recorded in Aoba, but it is not Tagaro, but an old woman who makes the sea. See CODRINGTON 160 372 f. 3) COOMBE 170 38-40. 4) 160 398-402.

young; this sow was the property of their maternal uncle Qat. When Qat prepared food for the sow, these two came forth, drew away the sow, took from her the food and ate it. But the sow went and cried to her owner Qat. When Qat saw that his sow was always coming back to him, and was thin, he watched and saw the boys coming out, "light in complexion, wonderfully fair". He jumped out, asked them where they came from ¹⁾, and understood that they were the children of his sister. Qat bade Ro Motari, his wife, to prepare yams for the twins, which she did. When Motari saw the two handsome boys "with their white hair", she liked them, so that they stayed with Qat and his wife. When they grew big, Qat shaped bows and clubs for them and told them about Taso. So the twins heated yams and pulled out the stones that lined the oven. Then they went inside the gamal of Taso, one at each end of it, and when Taso entered the gamal, one of the twins threw a red-hot stone at him and hit him, and when Taso ran down to the other end of the gamal, the other twin did the same, till Taso fell down and was killed by the twins. After this they also killed the ogre's mother and burned their house ²⁾.

Thus we see that the two children whose mother's brother is Qat, are said to be "light in complexion, wonderfully fair", and that they are described as "handsome boys with their white hair". We have related the myth in condensed form, since the theme of the man-eating ogre will appear very often.

Another myth of Maevo relates the following story of a woman and her child. Once the boy saw a young snake and begged his mother to let him have it. He took it, but the snake became extremely large, ate him up, and ate all the people in the place. But there was one pregnant woman who survived; and she dug a pit, took a flat stone and laid it over the pit and stayed within it. And she brought forth her children, twins. One day these two children begged of their mother to make them bows and arrows, and after that they killed the snake. Then they burned it up as a sign that the devouring snake was destroyed, after which the boys and their mother returned to their village and dwelt there ³⁾. I am strongly convinced that this is nothing but a version of the preceding myth and that the characters are the same. The ogre-(here snake)slayers in the numerous myths of Melanesia show distinct relationship to the culture heroes, as will be seen later on.

Qat appears again in the following myth of Maevo ⁴⁾: This is about the women that belonged to heaven, and had wings like birds. They came down to earth to bathe in the sea, and when they bathed they took off their wings. As Qat was going about, he chanced to see them; and he took up one pair

1) The same mythological theme occurs also in the Torres Islands, but in another connection. See DURRAD 205 74. 2) CODRINGTON 160 403 f. records also a similar version, where the man-eating being is, however, a snake. 3) CODRINGTON 160 403 f. 4) CODRINGTON 160 397 f.

of wings and went back into the village and buried them at the foot of the main pillar of his house. And when the women had finished bathing they took up their wings and flew up to heaven; but one could not fly because Qat had stolen her wings, and she was crying. So Qat took her to his house and married her. And Qat's mother took her and they went to work; and when the leaf of a yam touched her there were yams as if someone had already dug them up, and if a leaf of a banana touched her, all the bananas immediately ripened. But when Qat's mother saw that things were so she scolded her, so that the woman sat beside the post of the house and cried. And as she cried her tears flowed down upon the ground, made a deep hole and struck upon her wings; so she scratched away the earth and found them, and flew back again to heaven. When Qat came home and saw that she was not there he scolded his mother. Then he shot many arrows up to the sky, one arrow always hitting the preceding one until the arrows reached down to the earth. And there was a banyan root following the arrows. And Qat climbed up to heaven to seek his wife. He found her and took her back. But as the two went down by the banyan root and had not yet reached the ground, a person hoeing in the sky chopped the root off, and Qat fell down and was killed, and the woman flew back to heaven.

The importance of this myth lies in the fact that Qat is said to be the husband of a woman of the sky. The association of Qat, Tagaro, and Ambat, i.e. the megalithic immigrants, with the sky, will appear over and over again. The same myth with but very slight variations is also recorded from the Banks Islands Mota and Meralava ¹⁾.

Of these winged sky-women COOMBE says regarding Meralava ²⁾: "Their faces are far fairer than the fellows' here below". The man who married the sky-woman in Mota and Meralava is not described more precisely. It is, however, significant that, according to the Mota version, it is the spider (marawa) which we have seen to be the companion of Qat, which spins the line to heaven by which this man with the child of the sky-woman ascends to the sky, and by which he returns with the woman to the earth again ³⁾. In view of the fact that in the other myths this man is Qat or Tagaro, and because of the many other associations of the stone-using culture heroes with the sky, it is logical to suppose that in the Mota and Meralava version also this man is none other than Qat.

Tagaro and his brothers or companions are known on Aoba. Tagaro, also called Tagaro-mbiti, i.e. Tagaro the Little, is very wise and powerful. Tagaro-lawua corresponds to Tangaro-loloqong in the Banks Islands' stories and Suqmatua of Maevo. Tagaro-mbiti made fruit trees, food, pigs and lastly men. He first created two men; one of them took a yam and threw it upon the other by which this man became a woman. Tagaro-lawua, the Big, was a boaster and incapable. Like Qasavara of the Banks Islands,

1) See COBRINGTON 160 379-383, COOMBE 170 50-53. 2) 170 51. 3) COBRINGTON 160 383.

Merambuto tried to catch Tagaro's party by night and kill them, but Tagaro made them all sleep in a shell. Next morning Tagaro-lawua let out the secret, and Tagaro-mbiti made them sleep elsewhere¹). On the side of Aoba Island which is nearest to Pentecost, the story of Suqe is told, and he is represented as always in the wrong. When they made men, Tagaro said they should walk upright on two legs, Suqe that they should go like pigs (similar to the Banks Islands myth). Tagaro-mbiti went to Maevo and brought back night in a shell, like Qat in the Banks Islands. Tagaro is represented as the father of ten sons, of whom Tagaro-mbiti was the last, and exceedingly small. It was Tagaro also (like Qat in the Maevo story) who married the winged woman from heaven²). This story of the winged sky-women is identical with that of Mota, Meralava and Maevo³). SUAS gives as the name of Tagaro's wife: Tebisiu; and he further records that, since the island was very mountainous, Tagaro and his wife created a plain "en piétinant la terre"⁴). When the time came for his departure, Tagaro paddled away in a canoe, and since that time things have been changing for the worse⁵). The only association of Tagaro with stone-work appears in the myth where Tagaro is said to have built a stone wall round his fish pool.

In Pentecost, Tagaro has ten brothers, besides Suqe, (i.e. eleven brothers as in the Banks Islands) who accompanies and thwarts him. Tagaro came down from heaven, made men and other things and went back again to heaven. Suqe belonged to the earth. Whatever Tagaro made was right, Suqe was always wrong. Tagaro made the plains by treading the ground with his feet; where he did not tread there are hills (as in Aoba). He became the father of a boy. The boy kept asking his mother where his father was, and was told that he was in heaven. Since he wished to see his father, his mother made him a bow and an arrow. He shot up and hit the sky; his arrow turned into something like the aerial root of a banyan, up which the two climbed to heaven. There they found Tagaro fashioning images of himself. Tagaro consented to go back with them; but as he descended he cut the line above them and below himself, and went back to heaven, while they came down to Atabulu, the original seat of men in that island⁶). This Tagaro myth which corresponds exactly to the myth of the winged woman of Mota, Meralava, Maevo and Aoba, differs only in the detail that Tagaro (who in Aoba married the winged sky-woman as did Qat of Maevo, etc.) here takes the place of the sky-woman and himself belongs to the sky. That the usual conception of Tagaro is mixed up here with that of the winged woman is also evident from the fact that in the village Atabulu there is "a sacred stone of winged shape lying in the village place. It is called Vingaga, Flyer with webbed wings, and represents one Vingaga,

1) Regarding other myths of Tagaro and Merambuto see CODRINGTON 160 371 f, 409, 411. 2) CODRINGTON 160 26, 170-172, COOMBE 170 26 f, SPEISER 789 365, HARRISSON 342 261. 3) See CODRINGTON 160 172. 4) SUAS 807 244 f. 5) 162 294. 6) CODRINGTON 160 168 f, 162 293, DEACON 187 146.

who came floating in a canoe to shore and founded that town... after a time he flew back to heaven" ¹). From South Pentecost the usual story of the winged woman is recorded by TATTEVIN ²).

From South Pentecost the following story is related of a man who fell to earth from the sky whose name is, however, not given: "Il avait dans sa main un grillon. Jadis la nuit n'était pas connue, le grillon ne chantait pas... Il le mit sous son aisselle, et le grillon chanta... et il fit nuit... Ils furent très affectés... Cet homme dit: N'ayez pas peur le jour viendra encore... Sur la feuille d'un arbuste... il dessina le jour, et il la jeta dans la rivière, et l'aurore apparut" ³). Since this story agrees with the story of the creation of night by Qat in the Banks Islands and by Tagaro in Aoba, we may conclude that the creator of night of Pentecost is none other than Tagaro himself, although his name is not mentioned in TATTEVIN's record. This is also probable from the fact that the creator of night came from the sky as was said also of Tagaro.

We have already pointed out that the remarkable differences in customs, race, language, social organization, etc. of North and South Pentecost can be traced to immigration from Aoba to North Pentecost, and to South Pentecost from Ambrym. These differences can be recognized in the myths of this island. Besides the Tagaro tale mentioned, the themes of which are all found in the Northern New Hebrides, another myth is familiar in South Pentecost which contains besides the northern themes some which will later be found in the myths of Malekula and its neighbouring islands. According to this myth, the first human being, Barkulkul, and his five brothers came out of a coconut palm which opened of itself. They ate chestnuts which they roasted (like Qat's brothers in the Banks Islands and the nine children of Maevo). Barkulkul threw a chestnut at his sixth brother who was thus transformed into a woman (as in the Tagaro story of Aoba). The woman was named "Sermop", i.e. the split chestnut. The woman gave them fire, shells, vegetables, bamboo and sea water. (This giving of the sea water probably corresponds to the creation of the sea by a woman in Aoba and (by Tagaro) in Maevo). Barkulkul married this woman. Then he made himself a canoe and went to Ambrym. The woman he shut in a house by making a certain pattern with the rotang with which he locked the door. During the absence of Barkulkul, his brother Marrélül ("le devenu blanc"; this is the only mention in this myth of light skin) went hunting. An arrow fell into the house of the woman who took it. Looking for his lost arrow Marrélül penetrated into the house and had intercourse with the woman. (This corresponds to the conspiracy of Qat's brothers to get his wife into their own hands.) When Barkulkul returned and found the door broken open, his brother and his wife denied the adultery. Upon this Barkulkul orders all his brothers to make a design in the sand. Now Marrélül's design

1) CODRINGTON 160 48. 2) 856 (1931) 512. 3) TATTEVIN 856 (1931) 496 f.

agrees with the rotang pattern which Barkulkul had made on the door. Thus the adulterer is discovered¹). He orders Marrélül to make a great pit and to dig for a yam. When Marrélül is in the pit he kills him. (In the same way Qat's brothers let him descend into a hole to dig for a crab during which they try to kill him). After five days he brings Marrélül back to life. (In a similar way Qat of the Banks Islands revives his brothers on the fifth day after their having been killed by the ogre Qasavara. There are many other examples of the importance of the number 5 in the Qat-Tagaro of the other islands leaves no doubt as to their identity. This is die. "But Barkulkul did not want to die. He gathered up his belongings and departed. His wife and some others followed after him." They went out to sea and disappeared (like Qat and Tagaro in all the other islands). But those who remained wept. One of the six brothers, Mélésia, created war²). The similarity of so many of the details of this story with those of Qat and Tagaro of the other islands leaves no doubt as to their identity. This is also pointed out by CAPELL who says: "The character of Barkulkul again suggests one of these visiting strangers who in so many parts are looked upon as the founders of the tribal culture"³).

The same theme of adultery appears also in a myth recorded by SUAS from the Namara District on the west coast of Pentecost. The two rival brothers are here Tortali "le grand chef" and Ul, who in the absence of Tortali forces an entry into his brother's house and seduces his wife. From this mythological theme it is evident that Tortali belongs to the stone-using immigrants and this is borne out by the fact that he erected a big stone wall around his house and that he planted a few cycas palms near by, the remains of which, as we have seen, are still to be found. In this myth Tortali is called "le maître du monde qui avait pour fonction principale de piloter le soleil" and his brother Ul was "pilote de la lune"⁴).

Another myth speaks of a man on a tree and a ghost on the ground. Since the man does not throw down to the ghost the fruit which the latter

1) I should like to draw attention to this detail of the tradition which may be of considerable importance in solving the problem of the geometrical drawings of Ambrym, Aoba, Malekula, Pentecost, Atchin and Vao. The mere distribution of these drawings is in favour of their attribution to the megalithic culture; see HADORN in DEACON 187 132, 147, LAYARD 471 118. It is therefore highly significant that Barkulkul, whose association with Qat, Tagaro and Ambat—who are all stone-using immigrants—is evident, orders his brothers to make drawings in the sand. Furthermore, the following analogy is apparent: LAYARD (471) has pointed out the connection of the geometrical drawings of the New Hebrides with the threshold designs of the Tamil, and even with the labyrinths of the Mediterranean area. He has shown that the function of all these things is that of locking up and defence. Would it not in some measure support this view that Barkulkul locked up his house with a pattern of rotang and that this "locking-up design" reappears in the sand drawings of Marrélül? 2) TATTEVIN 856 984-993. 3) 121 57. 4) SUAS 806 902-905; some details of this myth not mentioned here are apparently due to missionary influence.

wants, the ghost is angry and lets the tree grow up, so that the man cannot descend. Then the man's hair grows long, and on this his mother hangs a yam for him which he draws up ¹⁾. This in some way is reminiscent of the episode of the Qat story: there too Qat's brothers commanded the tree upon which Qat is sitting to grow, or they command it to swell, so that Qat cannot descend. There Marawa lets him descend on his long hair and here too, the long hair plays a certain part but in a different way.

We have only very little information with regard to the mythology of Santo. Of the myths known, only that of the being Yetar (Sakaos) and Tautai or So'o (Tismulun) resembles those of the Qat-Tagaro-Ambat cycle. The following story is told of Yetar who, according to the existing belief, lives in the sky like Tagaro of Pentecost. A man went down to the sea to spear fish. He speared a fish and put it on a stone on the beach. After that he went back into the sea to spear more fish. When he returned he found no fish on the stone but a girl. He asked the girl whether she had seen a speared fish, but she replied that she was the fish and showed the spear wound on her arm. The man liked the girl and she became his wife. (This agrees with the way in which Ambat and Kabat found their wives, see later. This theme also occurs in a myth of Mota ²⁾ but without any reference to a culture hero.) After a time she bore him a family, one of which was Yetar. Yetar was crying, and the man, to tease Yetar's mother, said, "A fish's child is crying". The mother was very cross and she left the father and took the child to a big rock called Sere inside which was a cave. Here the child grew to manhood. When he was a young man he took a bamboo and cut his chest, upper abdomen, his arms and his back. Once a woman slipped into the cave desiring him. Her husband learned of this and vowed vengeance on Yetar. Yetar then made a canoe and sailed away to Big Bay in North Santo (this agrees with the frequent themes about departure in the Qat-Tagaro-Ambat myths ³⁾). Yetar is concerned with the birth of children. When a child is still in the mother's womb Yetar comes down from the sky and "cuts" the fingers apart, separates the toes, cuts open the mouth, opens the eyes and ears, etc. ⁴⁾.

The conception of the afterworld of the Sakaos is of interest for us. The mountain Takar or Urerwesere is the abode of the dead. On one side of the road leading to the afterworld two trees bend themselves down. If, during his life the dead man has not killed a man the trees allow him to pass; if, however, he has done so, one of the trees rebounds under him, and killing him, catapults him to Yetar in the sky who eats the dead ghost ⁵⁾. Upon this CAPELL remarks ⁶⁾. "The alternative name of the mountain, Takar, is certainly connected with the Tagar or Tangaroa cult". The catapulting to the sky by means of a tree is reminiscent of the way in which Qat killed the ogre Qasavara.

1) FIRTH 247 59 f. 2) COBRINGTON 160 383-387. 3) See also CAPELL 121 52.
4) DEACON 185 464 f. 5) DEACON 185 463 f. 6) 121 53.

Island, Kinbal came to the island, pulled down the coconut, took one of the nuts and went home to Loormarit in Seniang, where he lived, and where he planted the coconut, thus introducing the coconut in this region¹). Then Ambat made a house for himself, a woman's living house where he slept with his wife and a club house, where the four Ambat brothers slept²). (In this Ambat resembles Tagaro of Maevo who also built his gamal.) After having planted the coconut tree on Tomman Island, Ambat took his bow and arrow and with them he shot down a coconut, which he drank. Then all five brothers left Batnbrüngk, and went to live on Tomman Island, saying "that it was a small place and therefore more suited to them than the large district on the mainland"³).

As is well known RIVERS has expressed the opinion that the megalithic immigrants peopled particularly the little islands which were free of malaria, and that they avoided the mainland. Although the second part of RIVERS' opinion cannot be generally accepted as this study will show, the Ambat myth, on the other hand, confirms RIVERS' first opinion, since the Ambat here built up an artificial island. This creation of an artificial island which in its typical Polynesian form is the mythological fishing up of an island, is "a familiar companion of the immigrants into Oceania" as LAYARD puts it⁴). That it really belongs to the culture of the stone-using immigrants will clearly be seen in the course of this study.

The black woman Nevinbumbaau⁵) with the long or distended ears in the story of LAYARD appears as a servant of the Ambat "and definitely as an inferior race, though whether one which the Ambat brought with them, or one which they found already on the island, there is no sufficient evidence to show"⁶). According to DEACON, Nevinbumbaau is an ogress who tries to capture the Ambat brothers, and it is Ambat himself who labours to make Tomman Island habitable⁷). DEACON relates the following myth about Nevinbumbaau⁸): Nevinbumbaau dug a pit in her house in order to catch and eat men who fell down into the pit. Awirara once went to shoot fish. When he came to that house Nevinbumbaau invited him to eat with her, which he did. But finally the ogress took away the stone that was across the mouth of the pit and Awirara fell down into the pit, which she shut again. The same happened to three others of the Ambat brothers. When Ambat saw that his brothers did not return, he took his canoe and went to the house of the ogress. Ambat ate with the ogress and fell into the same trap as his four brothers. But there he saw the root of a banyan tree, the banyan tree of Iumoran on Tomman Island, their home. So Ambat took his knife of bone, "speared" into the earth and the earth split open, and they appeared out at the foot of the banyan of Iumoran.

This story is identical with that of the ogre Qasavara of the Banks

1) DEACON 184 627. 2) LAYARD 468 214 f, DEACON 184 618 f. 3) DEACON 184 619. 4) 468 217. 5) Winbumba-ah according to LAYARD's spelling. 6) LAYARD 468 217. 7) DEACON 184 623. 8) 184 720-723.

Islands who kills the brothers of Qat who are later brought to life again by Qat, and it is also identical with the story of Merambuto of Aoba who tries to kill Tagaro and his brothers. The banyan root along which the Ambat brothers get back to their islands is certainly reminiscent of the banyan root on which Qat of Maevo ascended to the sky to bring back his sky-woman, and in the same way the son and the wife of Tagaro of Pentecost ascended to the sky on a banyan root to bring back Tagaro.

We shall here revert to the Torres Islands and add a myth which contains the same themes, although not so clearly expressed as in the myths of the other islands. The myth runs as follows ¹⁾: Dilingavuv stole bananas in the gardens of the people, so that they decided to shoot him. But they were all afraid; only Marawhihi who was more clever than they all shot at him with a bird arrow of casuarina wood shooting one ear right off. Thereupon Dilingavuv decided to have his revenge. So when the people had a dance he gathered a great quantity of Tahitian chestnuts, roasted them and heated the stones, dug a very deep hole and covered over the mouth of it with the dress of leaves. As the people were dancing one of them fell out to take breath. Dilingavuv invited him to sit down on his dancing dress, and when the man did so he fell down into the hole. And Dilingavuv played the same trick on all, and on Marawhihi last of all. Then he took the stones that he had heated and threw them down into the hole to kill the men; but as he threw them down Marawhihi said to his companions: "Come round over to this side of the pit" and they did so, and not one of them was killed. But Dilingavuv went home thinking he had killed them all. Then Marawhihi saw a banyan branch bending over the pit; and he said: Let us shoot one arrow after another at that banyan branch, making each one strike and fix itself into the one before it. And they did so; and the reed-shafts of the arrows reached down to them into the pit. Then they climbed up on the line of arrows and got out of the pit, and so they all saved their lives.

We are not told whether Dilingavuv is an ogre, and there is no mention of a group of brothers either. It is, however, significant that Marawhihi is more clever than the others; the theme of the chestnuts appears again—although in a somewhat modified form—as in the myths of Qat and Qasavara of the Banks Islands and also on Maevo and Pentecost. Like the Ambat brothers the characters in this story fall into a pit and are saved by Marawhihi as they were by Qat, Tagaro and Ambat in the analogous ogre stories. It is typical that the rescue is effected by means of a banyan tree modified only in this case by the characteristic theme of the shooting of one arrow into another, which we have found in connection with Qat of Maevo and Tagaro's son of Pentecost who shot their arrows into the sky. It is therefore certain that this Torres Island story is identical with the others mentioned, but that it has undergone some modification.

1) CODRINGTON 160 373-375.

Another Seniang story relates the following¹⁾: When Ambat and his brothers were living on Tomman Island, Ambat married an Ambat woman called Lindanda. She was white like the Ambat brothers. Her origin is as follows: One day Ambat found a fish in a pool. Next day on going to the pool again he could not see the fish, but saw a girl whom he accused of having stolen the fish. This she denied but finally confessed that she herself was the fish. Then Ambat took her home to be his wife. (This theme bears close resemblance to the Mewun story of the origin of the wife of Kabat, and it agrees with the change of a fish into a girl in the story of the Sakaos. There, it will be remembered, the girl was Yetar's mother, and Yetar himself showed close resemblance to Qat and Ambat.) Now Awirara wanted her, so he said to the other three brothers: Let us go to the mainland. There let us take nimoos leaves (this appears to be the same variety of leaves as used for poisoning fish) and dive to the bottom where the giant clam is, and every time we come up we will munch the leaves. Then Ambat will come along and we will tell him that we are eating the inside of that clam. Then he will dive down where it is and the clam will snap his head off. They asked Ambat to go with them and he agreed to do so. But before setting out he said to Lindanda: "Here is a rope, if you see a dove come up from the sea, then tie this rope to a tree and hang yourself by it." Then he went with the brothers. The brothers deceived Ambat as they had agreed upon, Ambat dived down and the clam bit off his head. Then as a dove his spirit flew to Lindanda and as she saw this she hanged herself. The four brothers returned to Tomman Island, Awirara thinking to have Lindanda as his wife. But when they came up, they saw her hanging from the tree.—Another version²⁾ relates that one day Ambat departed apparently to the mainland to take part in a dance. Awirara took this opportunity of disobeying his brother's orders, and went into the hut. There he found the girl and violated her. When the girl's blood ran down plentifully, she in distress called out for Ambat who returned to Tomman Island. Seeing what had happened, he killed his wife and took arms against his brothers so that in the end he and they were all killed.—This story of adultery, in spite of a variation in some of the details, is strongly reminiscent of the story of Qat's wife and his brothers in the Banks Islands, and that of Marrélül of Pentecost who seduces the wife of his brother Barkulkul, also by penetrating into the brother's house during his absence. And Barkulkul's association with Qat and Tagaro has already been pointed out.

The identity of Ambat with Qat and Tagaro of the northern islands cannot be doubted, since their myths agree even in minute details. DEACON, who also remarked upon these similarities, pointed out that Ambat (really A-mbat, A is the personal prefix) and Qat are also linguistically identical³⁾.

1) DEACON 184 620-628. 2) DEACON 184 717. 3) DEACON 184 618 Note 2, 623.

In Mewun the Kabat take the place of the Ambat¹). Ka is the personal prefix in Mewun, as A is in Seniang. The five brothers are still known, but there are no tales recorded of them. Here it was the youngest who was the strongest and cleverest. One Kabat dwelt at Melpmes, the village with which Iumoran is linked by a ghost path (*nahal temes*). This Kabat is called Butwanabaghap, "The High Mountain". He is regarded as the creator of men, domestic animals and magic. Every morning he used to climb up to the east, to be in the sunshine because he was cold. And every day he followed the sun round until it sank. One day going south he came to the small island of Milip off the south coast. Here at night he saw a giant clam which sent up a great spout of light. He killed the clam with a stake, as Ambat had done in Seniang. Thereupon he returned to Melpmes carrying the giant clam. The rocks and bluffs along the coast from Milip to Melpmes are the tracks left by his footsteps, for he was a giant. (This in some way resembles the shaping of the country by the treading of Tagaro in Pentecost and Aoba, but it more probably means a leaving of footprints—an extremely characteristic incident the association of which with the stone-using immigrants will be found in many analogous cases in the course of this study.) On arriving at Melpmes, according to one version, the giant clam turned into a woman called Nimanin whom Kabat married (this corresponds to the changing of a fish into a woman in Seniang and Santo). Then Kabat, who lived alone in his club house in the sacred place (*logho*) at Melpmes built a house for his wife (like Ambat of Seniang who built his club house and a house for his wife, and Tagaro of Maevo who built his club house also). Nimanin bore two sons called Mwelnggil Veo and Ravaai. These children never saw their father Kabat for they lived with their mother. Not knowing who he was they shot their father with two arrows. "So the Kabat died and was buried in the *logho*. But his body never decayed. It was arranged in a sitting position, the hands resting on the knees and sat upon a flat stone which was supported by two low upright stones. On the head and knees, and at the buttocks were placed jars or cylinders of the prehistoric sacred pottery. Tall stones were then erected round the body and a large slab placed across the top, the whole forming a dolmen-like tomb, "like a house" as the native informant expressed it. This was then covered over with a mound of earth and small stones which can be seen to-day in the *logho* of Melpmes... In time Mwelnggil Veo and Ravaai procreated a number of stones called *tagha*²). ... They still stand in the *logho* at Melpmes to-day. There seems to be some doubt as to the number of these stones. In the list given 11 are named, and another is referred to; but in the *logho* of Melpmes only 10 stones were pointed out as *Tagha* stones. Furthermore the myth runs that after a while every stone gave birth to a child, that each one of these children had a name prefixed by the title Kabat and

1) DEACON 184 628-636. 2) All the stones bear names. DEACON gives a list of these names.

that each was the founder of one of the amwi or "houses" into which the people of Melpmes are divided. There are, however, only 10 of these amwi" ¹⁾. This agrees completely with the story of Qat of the Banks Islands, who has 11 brothers all having Tagaro as their first name. The origin of the Kabat brothers who came forth from a stone agrees with the origin of Qat whose mother was a stone, and with the origin of the tenth fair and yellow-haired child of Maevo who also came out of a stone. Bearing in mind the similarity of the Ambat and the 12 Qat brothers of the Banks Islands, WEDGWOOD has drawn the following conclusion regarding the number of brothers in Mewun ²⁾: "It does not seem impossible, therefore, that, according to Mewun mythology, there were indeed supposed to be 12 tagha stones, and that the existence of only 10 amwi in Melpmes is due to the dominating influence of the quinary system which is found throughout South Malekula (as it is too, in the Banks Islands)" ³⁾. It should, however, be noted that 12 brothers are found only in the Banks Islands and Pentecost whereas the number is 10 in Maevo and Aoba, 11 in Atchin, and 6 in South Pentecost. It has already been shown that all these groups of brothers are nevertheless identical.

The myth then continues: "The sons of Butwanabaghap eventually died and like their father were buried in the logho at Melpmes. Their graves were two pits surrounded by stones into which they were put in a sitting position, the pits were then filled in. On the knees, head and buttocks of each was placed one of the sacred pots, and some specimens of this sacred pottery to-day mark the spot where they rest. (During a visit to this logho DEACON saw this pottery.) ... Their bodies, like the body of Butwanabaghap, are supposed to have suffered no corruption."

This method of burial is still in use to-day, but in Melpmes only, which village we have seen to be closely associated with the Kabat. It is usual for clan magicians only, since they are regarded as the direct descendants of the Kabat, the only difference being that these men are laid prone and not contracted in a sitting position. They are buried in pits surrounded by a circle of stones in the logho, as the sons of Butwanabaghap ⁴⁾.

We shall interrupt our discussion on the mythological evidence in order to furnish the information which we have at our disposal regarding the stone-work of Mewun. We have hitherto postponed the study of this stone-work, since a knowledge of the myths is necessary to understand it.

As has already been stated, the tagha stones now lie or stand in the sacred place (logho = membrmbrkon in Seniang) of Melpmes. An avenue of coral blocks (dd, ee), running almost due east and west leads from one stone table at one end (a) to another called the nevet muogh (f) at the other. The lines of the blocks are not parallel but diverge towards the nevet muogh. On one side of this is a mound of trochus shells. Beside the

1) DEACON 184 645. 2) DEACON 184 632 f. 3) For the different systems of counting see DEACON 184 15. 4) DEACON 184 559 f.

other stone table is a mound of skulls (c). The coral blocks of which the avenue is formed comprise two sets; there are ten principal stones (ddd), five on each side, and these appear to be the stones which were procreated by Mwenggil Veo and Ravaai. The other set of stones (eee) is composed of smaller blocks which lie in disorderly formation near those just described. DEACON writes of them: "It is impossible to say whether these blocks originally formed "tables" or not. They presumably either stood upright, or formed horizontal stones of tables, and the others may have been supporting stones or may not". The nevet muogh, which means the "stone

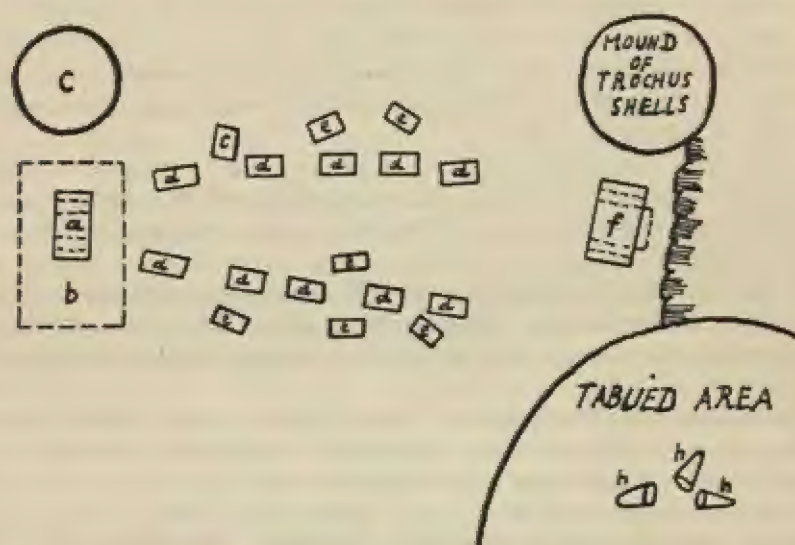


Fig. 7. Plan of dancing ground at Melpmes, Malekula. (After DEACON 184 647, fig. 38).

of life" or "the living stone" consists of one large slab of coral supported along one side and at the two ends by smaller uprights. The stone table (a) is built of a table stone supported at the two ends, and it stands inside the remains of a ruined hut. This hut (b) is known as the amel (men's house) of Butwanabaghap. The heap of skulls to one side of it is composed of the skulls of deceased men of Melpmes. The most sacred place in the logho is the tabooed area beside the nevet muogh. Here Mwenggil Veo and Ravaai are said to be buried. At the spot under which the bodies are supposed to be, lie three of the sacred pots (hh), each measuring from 18 inches to two feet in length. In the vicinity of the logho a low mound was pointed out to DEACON as Butwanabaghap's grave¹).

1) DEACON 184 646-649, 653, fig. 38 p. 647, Pl. XXIII (A).

In the inland district Uerik, the creator of the universe was a being called Smösbogaivis. He is "good". Opposed to him as an evil spirit is Nembalang, who caused men to die¹⁾. The myth about these two is certainly reminiscent of the other antagonists Qat-Tangaro loloqong (Banks Islands), Tagaro-Sugematua (Maevo) and Tagaro-Suge (Aoba and Pentecost) but no details are recorded about these two antagonists.

In Lambumbu, Hambat is known. He is responsible for the existence of magic. Hambat lived at the village of Lembelag. At his death a coconut also called Hambat sprouted from his skull. There is no trace of five brothers, but Hambat is also said to have been a white man²⁾.

Nothing is recorded in Lambumbu about sky beings, but one myth relates the attempt of the men of this district to climb up to the sky. In order to increase the height of a palm many bamboos were fastened to it up which the men climbed, until the bamboos "did not come up anymore"; so they abandoned their project³⁾.

In the district of Lagalag, Hambat appears again as Hambut who dwells in the sky. He was the creator of mankind and of all things in general. When he had made the first child he let it down from heaven by its umbilical cord⁴⁾.

In Big Nambas there is the creator Horo, who corresponds to Tagaro. A number of devil beings are opposed to him⁵⁾. Moreover, the story of the origin of the coconut from the head of a snake, the ancestor of Levenbush village, is of interest for us⁶⁾.

On Atchin, the culture hero is called Ta-har. He is regarded "as the benign creator, who is at once a stone and the moon, who made the islands and gave their inhabitants their languages, who arrived in a canoe and introduced the pig and the coconut to the ten legendary petromorphic brothers standing on the shore"⁷⁾. Elsewhere LAYARD says "Tahar is identified with the sun and the moon"⁸⁾.

On Vao it is Taghar who created heaven, earth and all things. He lives in the sky (according to CAPELL in the moon which he keeps alight). He is also associated with the sun, stars, clouds and winds⁹⁾. It was said that Taghar formed the souls of children out of clay, and put them into the moon from where they fell down to Vao. The children of the first couple which Taghar had created were two sons "qui ne s'entendaient pas, se séparèrent"¹⁰⁾. This is reminiscent of the antagonism of the other Tagaro myths.

Whether the myth "d'une tour construite en bambou sur la grande terre et d'une dispersion consécutive des ouvriers, comme pour Babel"¹¹⁾ relates

1) DEACON 184 46. 2) DEACON 184 637. 3) DEACON 184 734 f. 4) DEACON 184 638. 5) LAYARD 470 346, HARRISON 342 113. 6) HARRISON 342 115. 7) LAYARD 470 345 f. 8) 468 209. 9) CAPELL 121 62, RENAUDY 710 132 f. The problem of the cult of the sun and moon will be discussed later. 10) RENAUDY 710 133. 11) OLIVEAU 624 341.

an attempt to climb up into the sky, as in the myth of Lambumbu, or whether it is due to missionary influence cannot be decided.

On Ambrym the creator is called Parakulkul¹⁾ or Barkolkol, according to SUAS²⁾, but Vyu Yotab and Vyu Bungbung also took part in the creation. Vyu Yotab, who desires good, lives "on top" (this probably means in the sky as in the case of Tagaro of Pentecost, Yetar of the Sakaos, Tautai of Tismulun, etc.); Vyu Bungbung, who rules on earth, wants evil, thus recalling the antagonism found in the myths of the other islands. Originally all men walked on all fours. So Vyu Yotab made them go on two feet. But Vyu Bungbung said that the lazy men who would not work should walk on all fours and degenerate into animals. (This agrees with the myth of Qat of the Banks Islands who made men, who formerly walked on all fours, walk on two feet, and this was also done by Tagaro of Aoba against the will of his antagonist Suqe, who wanted them to walk on all fours³⁾). It is beyond all doubt that Barkolkol or Parakulkul of Ambrym is the same as Barkulkul of South Pentecost, whose association with Qat, Tagaro, etc. has already been pointed out. This mythological connection with South Pentecost is all the more understandable, since, it will be remembered, South Pentecost had been peopled from Ambrym, and because the language of Olal from where this myth comes is closely related to that of South Pentecost⁴⁾, and in the Barkulkul myth of South Pentecost previously mentioned, Barkulkul is in fact described as having gone to Ambrym, whence he returned to South Pentecost.

In the Baki or Burumba district in the west of Epi, Tumbo na Toru is the creator of everything. Now the word used is Marano, the White Man. When the natives saw the first white men they thought these must be the great chiefs of antiquity and so the tradition changed from Tumbo na Toru to Marano⁵⁾. This identification with the white men is of the greatest importance, since it is likely to indicate light skin. We have enumerated the many reasons leading to the assumption that Qat was light skinned, and we have seen that the first Europeans were accordingly identified with Qat. In Seniang the first Europeans were believed to belong to the same race as the Ambat owing to their white skin, and were therefore called Ambat too. CAPELL is therefore quite right in remarking with regard to our present myth: "It is more likely that further investigation might have shown something akin to the Hambat belief of South West Malekula"⁶⁾.

The creating spirit in North-east Epi is variously called De, Ndre, or Mreie according to the dialect, but the Rev. T. SMALL mentions also without further definition Supua and Tesupua, which looks like Supwe or Suqe of

1) LAMB 453 212 and quoted by SPEISER 789 365. 2) 806 906 ff. 3) See also LAMB 453 215 quoted by SPEISER 789 359, CAPELL 121 63, SUAS 806 906-909, the latter recording only the two beings Barkolkol and his antagonist Bugliam. 4) SPEISER 789 90. 5) CAPELL 121 64 f from GUNN. 6) 121 65.

Maevo, Aoba, Pentecost, etc. He mentions, but does not relate "a legend of the letting out of the water to account for the islands". Certain markings in the rocks are explained as Mreie's footprints, and others as the footprints of Supua. Supua is said to have resided on the island until he left it in a fit of anger¹). This leaving of footprints reminds one of the footprints left by Kabat in Mewun, and it moreover agrees with the footprints of Maui of Polynesia, the hero who is analogous with Qat, Ambat, Tagaro, etc.²). Supua's final departure agrees completely with the departure of Qat in the Banks Islands, Tagaro in Maevo, Aoba, Pentecost, of Barkulkul in South Pentecost and Yetar of the Sakaos.

With regard to the origin of the coconut, tradition relates that it sprang from the body of a snake which was burnt by a man after the snake had had a female child by this man³). We have found the same theme in the analogous story of Big Nambas. The Epi story furthermore resembles the following myth of the origin of the coconut of the Torres Island Hiw⁴). This story relates that a large snake gave birth to a girl. A man of Motalava came to Hiw and married the girl, but she deceived him about her mother, the snake. A child was born to them, but the man did not yet know that his wife's mother was a snake; and when the child was born she gave it to its grandmother, the snake, that it might look after it while she and her husband went to work, and the snake coiled itself round the child. One day when the man and his wife returned from their garden, he went first, and coming to the door of the house he saw the snake and killed it. Then the woman mourned for her mother and buried her. One day a coconut sprang up from the grave.

Similar to the Tagaro story of Maevo and the story of Aoba, the origin of the sea is also described in Epi. An old woman surrounded the sea by a stone dyke, but broke down the dyke later, so that the sea flowed out⁵).

The very interesting intermediary position of Fate which lies between the Melanesian islands of the north and the Polynesian influenced islands of the south has already been discussed. This is also traceable in the mythology, and Fate is therefore of special interest for a comparative study. "It is remarkable that ... Takaro or Tangaloa is ... recognized as the Supreme Being" says MACDONALD⁶). TURNER record that "Supu was the name of their principal god of the heavens, who was said to be the creator of Fate and everything on it"⁷). It is also Supu who brings the souls of the dead to the sky, to the sun, to the moon or into the underworld⁸), but the accuracy of this information, which is not confirmed by any other author, has been doubted by SPEISER⁹). It is certain that Supu of Fate is

1) CAPELL 121 64-66. 2) See also CAPELL 121 66. 3) RIDDLE 718 162 f.
4) DURRAD 205 111 197 f. 5) RIDDLE 718 160-162. 6) 513 166 quoted also by
SPEISER 789 359 and CAPELL 121 68. 7) 902 334 and quoted by SPEISER 789 359.
8) TURNER 902 334 quoted by SPEISER 789 325. 9) 789 325, see also GRAY 305 232.

identical with Supua of Epi of whom we were, however, only able to make the small but characteristic remark, that he finally departed.

Another story of Fate runs as follows: In the beginning a chief on Meli had two children who were always crying and who never slept, because the sun never set, and there was no darkness or night, but perpetual day. So he set out in search of night and, after going round the island, was directed to the most eastern point to a place called Baulelo. Here he caught the darkness of night and sleep as it arose from the sea and brought it back to his home¹). This agrees with the creation of night by Qat in the Banks Islands, and by Tagaro in Aoba and Pentecost.

According to another story, all things such as yams, pigs, etc. came down from heaven. The people of heaven used to come down, take off and lay aside their wings and fish at low water by night. In the morning, putting on their wings, they reascended. A man watched them and hid the wings of one, a woman, who therefore could not reascend, and whom he took as his wife. She bore two sons called Karisibum and Makatafaki. She afterwards found her wings and returned to the sky. Her two sons, after they had grown up, were able to follow her. They brought, or let down in a large basket, the different kinds of yams, etc. with which the world is filled²). The identity of this myth with the myths of the winged sky-women already mentioned is evident. It will be remembered that in Mota, Meralava and South Pentecost they were married to an ordinary man, although, at least in some of these myths, it was probable that this man was Qat. In Maevo she was married by Qat and in Aoba by Tagaro. There is still another point to be mentioned: in the near Nguna Island which, culturally, is closely connected with Fate, and where the same myth, with insignificant variants was known, the native informants on the subject of this sky-being "thought it was Mautikitiki, but they were not sure"³). If this be true, this would agree with Tagaro who, according to the Pentecost version, came from the sky, and the other culture heroes which were connected with the sky. In this case, the phrase "all things such as yams, pigs, etc. came down from heaven" would bring the Polynesian Mautikitiki still closer to the heavenly culture heroes. In the Nguna version Karisibum and Makatafaki become Karisipuma and Makosavaki⁴). Whereas in the Fate version it is only said with regard to the two sons that "they were able to follow her", the following is specified in the Nguna version: "They took an arrow and shot it up and the point of it stuck in heaven. They then shot another one and the point of that stuck in the end of the first one, and so on till they had shot ten arrows. They then climbed up on these arrows to heaven and saw their grandmother. They asked where their father and mother were ... With a piece of sugar cane ... they ... cut the eyes of their grandmother ...

1) MACDONALD 517 a 731. 2) MACDONALD 517 a 731 f. 3) CAPELL 121 69.
4) CAPELL 121 69 f.

who was blind, and she saw. (This is in some way reminiscent of the separation by cutting of the fingers, toes, and the cutting open of the eyes, etc. of the children in the mother's womb by Yetar of the Sakaos and Tautai of Tismulun, Santo.) Makosavaki took out the eye of his brother Karisipuma and showed it to his father and mother, and took it back again and put it in its place in his brother's body and said to him: Have you seen my father and mother, and he said: Yes, I have seen them"¹). This ascension to the sky on arrows shot one into the other we have found also on Maevo where Qat follows the winged woman to the sky in this way, and on Pentecost where Tagaro's son follows his father into the sky in a like manner also. Furthermore, we have come across this theme in connection with Dilingavuv of the Torres Islands, whose association with the Qat-Ambat myths was evident. CAPELL has stressed the interesting and very strong resemblance of this myth with that of the Maori by saying ²): "The story has its counterpart in Maori legend, where Karihi and his brother Tawhaki try to ascend into heaven, but in this case Karihi fails, and only Tawhaki reaches the dwelling of his blind grandmother Matakerepo. Tawhaki restored her sight to her". It should be noted that in the Nguna version too it seemed to have been only Makosavaki who reached the sky although the myth does not say this explicitly, speaking on the contrary partly in the plural, so that it would seem that this applies to both of the brothers. But since it is said later "Makosavaki took out the eye of his brother Karisipuma and showed it to his father and mother, and took it back again and put it in its place in his brother's body" etc. it seems probable that Karisipuma, like Karihi of the Maori myth, did not reach the sky. This would also correspond to the Tanna myth (see later) according to which only one child came into the sky restoring the sight of the old woman there.

The Polynesian influence is most clearly manifest in the person of Maui-tikitiki and Tamakaia (his offspring or grandson, or his father according to the Nguna version). These were the first men and the creators of all things. Maui fished up the island, though the rope broke in the process, and this accounts for the scattered islets. To raise the land he stood on Emae Island where his footprints are still shown.³). TURNER records that men were thought to have been created from stones and earth⁴). Thus we see that the place of the culture heroes Qat, Tagaro, Ambat, etc. is taken here by Maui who, like them, is the creator of all things. The theme of the creation of an island, which we have also found in connection with Ambat of Malekula, appears here for the first time in the general Polynesian form as the fishing up of an island. And the typical Polynesian theme of the "footprints" of Maui we have related before in connection with Kabat

1) CAPELL 121 69. 2) 121 70. 3) MACDONALD 517 a 731, 513 173, COBBINGTON 162 295, SPEISER 789 365, SOMMERVILLE 796 366, ERSKINE 231 334, BRENCHLEY 92 230, CAPELL 121 68, where certain differences between the Fate version and the Polynesian Maui myth are discussed. 4) 902 334 quoted by SPEISER 789 365.

of Mewun, and Merei and Supua of Epi. Maui had a wife named Lei Mauitikitiki¹). This coincides with the name of Qat's wife of the Banks Islands, which is Iro Lei, Iro meaning woman (for instance: Iro Vilgale, the first woman, Iro Qatgoro or Iro Ul, the mother of Qat, and in Maevo: Ro Motari, Qat's wife) and Lei being the name.

With regard to Erromonga we have seen that Polynesian influence apart from the introduction of hereditary chieftainship, has had very little effect. This is confirmed by the mythology which also shows strong resemblances to the Northern New Hebrides. On the other hand, as far as I am aware, nothing is known of Maui. According to the myth of Erromonga, Nobu or Nabu, a superior being, is the creator of all things and also of the island. There are several versions of the creation of the first human being. One version states that men were made of earth. Men at first went like pigs, and pigs walked erect like men. This was changed by a lizard going up a coconut tree falling on the back of the pig and making it stoop and creep. After the creation of men, women, and the island, Nobu went away to another island²). BRENCHELEY tells us that the Erromongans call all strangers "Nobu" "whether black or white"³). Regarding this CAPELL remarks: "A question we would like to be able to answer but cannot, is: Was Nobu a white man like the Hambat of Malekula?"⁴). What we can conclude with certainty is, that the Nobu myth belongs to the cycle of the Qat-Tagaro-Ambat myths: Nobu is the culture hero who, like Qat, Tagaro, Ambat, etc. created everything; that men first walked on all fours and pigs upright has its counterpart in the myths of the Banks Islands, Aoba and Ambrym; this original order was changed in the Banks Islands by Qat, in Aoba by Tagaro and in Ambrym by Vyu Yotab; that Nobu departed finally from the island agrees with the final departure of almost all the culture heroes we have met so far. We have found the identification of the culture heroes with Europeans in the case of Qat of the Banks Islands, the Ambat of Seniang and Tumbo na Toru of Epi, and we have indicated the direct source of information or the indirect conclusions showing that these culture heroes were light-skinned. Although BRENCHELEY says that the foreigners "whether black or white" were called "Nobu", I think the analogies are strong and numerous enough to assume that in all probability Nobu was light-skinned.

That this is actually the case is confirmed by the following Erromongan myth which HUMPHREYS records as follows⁵): "There have been three peoples in the island. The Nompo or Nombo were a very light-skinned folk, who still live in the centre of the island, although no one ever sees them nowadays. They were the first-comers and were followed by the Losorvu, a very dark-skinned, woolly-haired folk, much like the present day Erromon-

1) CAPELL 121 68 f, MACDONALD 517 a 731. 2) TURNER 901 496, quoted by SPEISER 789 366, ECKARDT 209 24, COBBINGTON 162 295, HUMPHREYS 398 166 f, 186, BRENCHELEY 92 320, ROBERTSON 731 389, GRAY 305 232. 3) 92 320. 4) 131 72. 5) 398 186 f.

gans. These second people saw the Nombo working in their gardens with the digging stick. Not knowing horticulture, they asked what those women, pointing to the digging sticks, were doing, and seeing that they were good called out: "Give us that woman." As a result they learned the use and care of gardens and became agriculturalists. The third people are the present Erromongans." HUMPHREYS does not identify Nompō or Nombo with Nobu or Nabu in spite of the similarity of their names, but, on the contrary, records their stories as two separate and apparently quite independent myths. But I am strongly convinced that the characters of both these myths are identical, the only difference being that in one instance the myth speaks of an individual character and in another of a group of beings, an inconsistency which, however, equates them even more closely to Qat and Ambat. The opinion that the light-skinned Nombo were actually the stone-using immigrants is strengthened by the fact that they are described as the introducers of agriculture, as the megalithic people in Melanesia generally are, and that chronologically they preceded the dark-skinned Melanesians, a fact which will also frequently be confirmed as this study proceeds. Moreover, in another myth Nobu is described as the creator of the chiefly class of the island¹). Now, it has been seen that in the Northern and Central New Hebrides, it was the stone-using immigrants who became members of the high ranks thus replacing the institution of chieftainship, and it will be seen in the course of this study that the stone-using immigrants became the chiefs in many areas of Melanesia. For all these reasons I am of the opinion that Nompō or Nombo and Nobu or Nabu are identical, and that they are representatives of the stone-using immigrants.

Another piece of evidence for connection with the northern islands is the myth of an old woman who alone knew of the sea. From this she took water for her food after which she covered it with a stone. Her niece who was curious, tried to lift the stone herself and the water poured out with great power thus forming the sea²). This story we have come across in Maevo and Aoba, a certain version of it in Pentecost, and also on Epi.

As already mentioned, in spite of Polynesian influences the Melanesian character has been well preserved in Tanna. The mythology shows close connections with the Northern New Hebrides as well as Polynesian influence.

Tangalua (this is the Tanna form of the word Tangaroa) had an Aniwān woman, Seimata, as his wife. She had a little boy. The Aniwāns hated Tangalua because of his eel or snake-like form. So they killed him with a big dose of kava. Before he died he told Seimata to watch the place where he was buried, for something would grow there. Then he died and was buried. Out of his two eyes grew a coconut tree. But only Seimata and her child knew that its nuts were good to eat. One day the little boy

1) See HUMPHREYS 398 186. 2) HUMPHREYS 398 188.

revealed the secret to the other boys, whereupon Seimata was very angry and pulled up the tree and tore it to fragments. The wind scattered these fragments among all the islands, so they all have coconuts now¹⁾. HUMPHREYS, who also records this myth with some insignificant variations, gives the further information regarding the wife of the snake: Besides the trees, a spring of very sweet water gushed forth over the place where the snake's body lay, around which the woman built a strong stone wall. She forbade her son to tell anyone of this water. But one day the boy revealed this secret. In anger at his disobedience, the woman threw down the stone wall surrounding the spring and the water gushed forth in a great stream, which eventually formed the sea²⁾. We have encountered both these themes—the origin of the coconut and the making of the sea—in some of the myths associated with the culture heroes Tagaro, Ambat, etc.

Another Tanna myth relates the story of a man who, when out one day shooting, saw a bird in a tree. Just as he stretched his bow the bird turned into a woman whom the man took for his wife. Previous to this time the people of the island had lived entirely on nuts and native fruits, but the woman introduced the yam into Tanna. Her name was Masineruk. Some time later she had a son. Once the grandmother was beating the child. Masineruk was very angry and, taking her son, she ran towards the beach. The sea parted and the woman and her child walked away on the bed of the ocean. When her husband tried to follow, the water closed behind them³⁾. It is almost certain that this is a version of the familiar stories of the winged women. Here this woman introduces the yams. In a somewhat similar way it was said of the winged woman of Maevo who was married by Qat that if she stretched out her hand for yams, bananas, etc. these came into her hands without her being obliged to gather them. In Fate, Karisipuma and Makosavaki, the two children of a man and a winged sky-woman let down from the sky baskets containing yams and other things. That the sky-beings finally depart from the earth returning either to the sky or going over the sea, is the characteristic incident recurring always in these myths of the other islands. In Mota, Maevo, etc. the winged woman left her husband because he scolded her. In the same way the mother of Yetar (the sky-being of the Sakaos) who from a fish turned into a woman (that is the way in which also the Ambat-Kabat women originated) left her husband because he had derisively called her child, the child of a fish. That this woman Masineruk was really a sky-woman and that she belongs to the cycle of the Qat-Tagaro-Ambat myths, is also evident from the following Tanna story recorded by HUMPHREYS⁴⁾: Two women and a little girl were clearing their garden and burning the dry leaves. The child was warned not to go near the fire, but it did so and was caught into the draught and carried up,

1) RAY 696 151. 2) HUMPHREYS 398 92 f. 3) HUMPHREYS 398 94 f. 4) 398 97-99.

with the smoke, to heaven. (In the same way, it will be remembered the winged woman of Mota made a fire, in the smoke of which she ascended to the sky). Here she saw a blind woman feeding a large number of pigs. Feeling very hungry the child began to eat the pigs' food. The pigs made a disturbance, which caused the blind woman, whose name was Masineruk, to cry out "Who is there?". The child replied "It is I". (This is strongly reminiscent of the light skinned children of Qat's sister in Maevo, who, when they came to Qat's house took away the food of Qat's pig to eat it themselves and who later killed the ogre Taso. This theme is also found in one of the myths of the Torres Islands)¹). Then the little girl made a mixture of fruit and leaves, told the blind woman to dive into a pool, and while she was below the surface, the girl poured the mixture into the water. On coming out of the pool Masineruk found her sight restored. (In a somewhat similar way Karisibum and Makosavaki of Fate restored the sight of their grandmother in the sky, by cutting open the eyes; see also the Polynesian parallel mentioned.) One day the child saw the earth below her and her home, a sight which made her very homesick. So Masineruk lowered her down on a long line through the door in the floor of heaven. When the child reached the earth the line was seen to ascend to the sky again, and, later, returned at intervals, each time with a pig fastened to the end. These pigs were a present to the child and her people from Masineruk. —This descending from the sky corresponds to the various forms of descending from the sky on the spider's line (Mota), by means of the banyan root (Maevo, Pentecost), etc. mentioned before. It is of particular interest in that here pigs are let down from the sky to the earth, since we have repeatedly seen that pigs were introduced by the light-skinned culture heroes whose association with the sky was frequently evident.

Ascension to the sky in a manner similar to that we have just seen is mentioned in the following story of Tanna. Amosisiki (this is the local form of Mauitikitiki) had intercourse with a woman and the son born was named Ka. A dispute arose one day between him and the natives, and in anger he set fire to his house and went up to the sky in the flames²).

The close connection with the Qat-Tagaro-Ambat mythology is even more evident from the following myth of Teramsamus (Ramsumas, according to HUMPHREYS) and the Polynesian Matiktiki: Teramsamus having eaten all the inhabitants, goes and looks for black people, eats them, looks for white people—"this does not mean Europeans"—takes them and throws them into a hole in a rock and shuts them up. Then he tells them that they are to wait for him till he goes and makes taro for their food. They remain in the cave and sing and dance. Matiktiki goes past and hears dancing. He asks them what they are doing there, but they say: Our ancestor goes to make taro for our food. But Matiktiki says: He will kill you and goes to make food with you. Then he breaks in pieces the rock.

1) See DURRANT 205 74. 2) CAPELL 121 76 from GUNN.

They come out and run to a place where they see a row of fish. They eat and leave none of Teramsamus' food. When Teramsamus comes back to the hole in the rock he sees that they are gone. Matiktiki and the children run to a makopo, a variety of bread-fruit tree. They pull out its core and the children go in and fill up the space. Matiktiki sits on the edge of the core hole and puts the core in again. Teramsamus who feels hungry plucks the makopo, lays it on the fire and cooks it. The youngsters feel the steam, but Matiktiki tells them to put out the fire, and the fire goes out. Teramsamus takes away the bread-fruit and lays it down and goes and looks again for wood. They pull out the core and come out and put the core in again and run to a casuarina tree (nil). They all climb to the top of the tree. There they are finally discovered by Teramsamus who asks them how they managed to get there. They reply: We went on the palms of our hands. So he goes there on his hands and splits them. Then they say: We went on the soles of our feet. The same thing befalls his feet, his head, and his knees. Then Matiktiki says: We went on this thing, and lets down a small rope, to which Teramsamus hangs on, and goes up. Then Matiktiki cuts in two the small rope and Teramsamus falls down and is killed. They send forth a black dove, then a bronze-wing dove and then an ant to see whether he is dead. They all see that he lies and is silent. Finally they send a small black bird which goes and passes right through the body. They exclaim: He is dead verily. Then Matiktiki takes a bamboo knife, lances the body and one by one they rise till everyone who had been eaten came to life¹). In a similar version of this story it is the ogre Semsem who devoured all the people of Tanna. A woman saved her little girl beneath a shrub, but then the woman was eaten herself. The child grew to be a woman and bore twin sons, whom she named Kasasaou and Kaniapnin. She taught them to use spears, bows and arrows, with which the boys later killed the ogre. The verification of death with the birds, the cutting of the body to pieces and the changing of those pieces into the people eaten before, occur likewise in this story²).

In analysing this story, we find the following analogies: Teramsamus looks for white people, "this does not mean Europeans", to eat them, and he shuts them up in a rock from which they are liberated by Matiktiki. It may be added that, according to one version, the ogre was killed by two children of a woman who had been spared as a child. The ogre story agrees with that of Qasavara of the Banks Islands who killed the brothers of Qat, and with that of Nevinbumbau of Malekula who let the Ambat brothers fall into a pit to eat them; it corresponds also to the story of Dilingavuv of the Torres Islands who too let his victims fall into a pit. In one of these stories they are saved by Qat, in the other by Ambat and in the Torres Islands by Marawhihi. The place of Qat, Ambat and Marawhihi is taken in this story by Matiktiki in accordance with the Polynesian influence on the Tanna culture. The two children of Qat's sister in Maevo, the only sur-

1) RAY 696 149 f, GRAY 305 656-659, HUMPHREYS 398 99 f. 2) HUMPHREYS 398 95-97.

vivors after Taso had killed and eaten all the people (this coincides with the Semsem version of Tanna) and who later kill the ogre, were light-skinned, as was probably Qat himself and also the Ambat. Here too the victims of the ogre are white skinned; we understand now why "this does not mean Europeans". These white people, before saving themselves, eat the food of Teramsamus. In the same way Qat, before saving himself, took all the food out of the oven of the ogre Qasavara. Matiktiki saves the white children by shutting them up in a bread-fruit tree ¹⁾. This agrees with the story of Qat who saves his brothers from Qasavara by shutting them up in the rafters and the house posts of Qasavara's gamal; in a similar way, Tagaro of Aoba hid his brothers in a shell and other places from the pursuing ogre (Merambuto). The final rescue on the casuarina tree in Tanna agrees completely with the rescue of Qat and his brothers on Qat's casuarina. The attempt, frustrated by Matiktiki, to kill the children by the heat of the fire is reminiscent of the attempt of Dilingavuv of the Torres Islands to kill his victims by heated stones which he threw into the hole in which he kept them, an attempt which was frustrated there too by the analogous hero Marawhihi. The manner in which the ogre is killed in Tanna differs from that related in the Banks Islands. Whereas Qat catapults the ogre into the sky, the method of killing in our present story characteristically agrees with that related in the analogous Polynesian story. Thus the two boys Laupanini and Laupanana of the Samoa story kill the ogre Tuliwae Pupula by letting him climb up a rope and when he is at the top they let go the rope and the ogre falls to the ground and is killed ²⁾. The corroboration of the ogre's death by means of the birds and finally the creeping through the body of the ogre agrees with the story of the Polynesian Maui, who, with many birds went out against Hine-nui-te-po to kill her. Also Maui crept through her body, the only difference being, that, since the birds laugh at that moment, the ogress wakes up and kills Maui ³⁾.

The theme of the fishing up of the island is not recorded from Tanna. The creator is Wuhngin (East and West Tanna) (Uhngen, according to GRAY); he formed the natural features of the country (by this he is a physiographical shaper as Tagaro in Aoba and Pentecost); he created the people and gave them their customs. In South Tanna this creator is called Kumesen ⁴⁾.

It has already been seen that many elements of the Northern New Hebrides are lacking on Tanna. The secret society does not exist, the lying drum and the pig found in all the other New Hebrides are, on this island "nur verkümmert vertreten", and the remains of stone-work were so insignificant

1) The bread-fruit tree, called mbeteb in Seniang, is of some importance particularly in the graded society, thus for instance as wood for the images in the grades 4, 7, 13, 14, 15 of the Nimangki society of Seniang. DEACON 184 321, see also the information of LAYARD previously mentioned. 2) See HAMBRUCH 338 243-246.

3) HAMBRUCH 338 314. 4) CAPELL 121 77, GRAY 305 232.

that HUMPHREYS declared that megaliths had never existed on the island; on the other hand, we have emphasized the connection of Tanna with New Caledonia. Nevertheless, the mythology shows that the Qat-Tagaro-Ambat myths reached this island, although some of the mythological elements came subsequently from Polynesia.

In Futuna, which culturally strongly resembles Tanna and Aniwa, the same ogre story is known as on Tanna. But here the ogre bears the name Taposiesi and the hero who saves the children is Moshikishiki, corresponding to Matiktiki of Tanna. Instead of the casuarina tree it is the almond tree by means of which they climb up into the sky. The death of the ogre is corroborated in a similar manner, but here it is the boys who came to the ogre „like a fly“ and „like a large black ant“¹⁾. The same story with very slight variations is also known by the people of Aniwa²⁾.

In Futuna and Aniwa Moshikishiki (according to GUNN: Amoshikishiki in Futuna and Moshikishiki or Matshiktshiki in Aniwa) fished up the islands Futuna and Aniwa. He planted his feet firmly on the coral rocks opposite each island to lift them above the waters, and they show the deep print of his feet. The line broke and is now shown as a row of stones jutting out from the coast of Futuna³⁾. According to the Aniwa account, the volcano on Tanna was once a part of the island of Aniwa. Rain fell day after day and the sea rose and began to cover everything. Moshikishiki, fearing the fires of the volcano would be extinguished by the flood, split it off and floated it across to Tanna, where it still is. On the southern end of Aniwa there was a beautiful spring and a river with rich lands all around. But the people would not do what Moshikishiki wanted them to do; so he became angry, and split off the richer part of Aniwa with the spring and the river and sailed away with them across to Aneityum⁴⁾, so that Moshikishiki, here also, appears as a physiographical shaper like the other analogous culture heroes mentioned previously. It has already been mentioned that, according to a story of Futuna, many generations ago a large canoe full of men, women and children drifted from Tonga to Futuna and Aniwa, led by Moshikishiki (according to GILL and ECKARDT he is called Maisiki). Then the god is said to have returned to his home the ocean⁵⁾.

The story of Tangaroa told on Tanna is also told on Aniwa. Tangaroa's wife who, according to the Tanna version, originally came from Aniwa, is here named Keke. After Tangaroa's death (here also he is an eel or a sea snake) she cut off his head and planted it, and out of it grew the sago palm and the coconut palm (niu)⁶⁾.

In Aneityum we meet with Maui in the person of Mauitikitiki (as in Fate and Nguna). He is the great rain god, but apart from this nothing is known

1) RAY 696 148 from GUNN, HUMPHREYS 398 118. 2) See RAY 696 148. 3) CAPELL 121 75, SPEISER 789 366, GUNN 313 217, GRAY 305 656, PATON 643 333. 4) HUMPHREYS 398 121f, SPEISER 789 366, PATON 643 333. 5) GILL 286 177 f. ECKARDT 209 24 f. 6) RAY 696 150, HUMPHREYS 398 121 f.

of him¹). The fishing up of Aneityum was done by a spirit called In-hugaraig who eventually set man and woman upon the island. He was covered with a shell like a tortoise, and cast his shell away leaving it behind him when he went travelling²).

On Aneityum, the story is also known of the removal of a volcano which was formerly on this island; it was removed to Tanna. This is not attributed to any particular being, but it is said in a general way that the natmas (ghosts and spirits too) were responsible for its removal³).

These data make it probable that, particularly in the most southern islands, Futuna, Aniwa and Aneityum, many mythological themes came to this area from Polynesia.

Who are the stone-using immigrants?

DEACON, LAYARD and HARRISON are all three of the opinion that the light-skinned culture heroes Qat-Ambat are the introducers of the megaliths, but this opinion applies to a limited area only. Indeed DEACON's assumption of the existence of four different cultures applies to the whole archipelago of the New Hebrides⁴), but one of the inevitable drawbacks of DEACON's posthumous work is that we do not know all the facts upon which he based his conclusions. Here again it is unnecessary to emphasize that in our opinion all the culture heroes mentioned so far are one and the same, although they appear under different names. The stories recorded about them show such complete agreement that one cannot separate one from the other. It is therefore evident from these stories that the following heroes are identical: Qat (Banks Islands, Maevo), Marawhihi (Torres Islands), Tagaro (Maevo, Aoba, Pentecost), Takaru (Malo), Tahar (Atchin), Taghar (Vao), Takaro or Tangalua (Fate), Tangaroa (Aniwa), Tumbo na Toru (Epi), probably also Supua and Mreie (Epi), Tangalua (Tanna), Ambat, Kabat, Hambat, Hambut, Horo (Malekula), Barkulkul (South Pentecost), Barkolkol and Vyu Yotab (Ambrym), Yetar (Sakaos), Tautai (Tismulun) and Nobu (Erromonga). In the Southern New Hebrides we have Mauitikitiki (Fate, Aneityum), Matiktiki (Tanna), and Moshikishiki (Futuna, Aniwa), who are identical with the culture heroes of the other islands of the New Hebrides, the only difference being that they are composed of mythological elements of the Northern New Hebrides on the one hand, and of Polynesian elements on the other.

In the following cases these culture heroes or the sky-beings associated with them, were found to be light skinned: The tenth child of a group of brothers of Maevo, who as we have seen, corresponds completely with Qat

1) HUMPHREYS 398 112, RAY 696 147, CAPELL 121 79, LAWRIE 467 713, GRAY 305 656, CODRINGTON 162 296. 2) HUMPHREYS 398 112, LAWRIE 467 712 f, according to CODRINGTON 162 289, 296 he is called "Nugeraian", according to H. MURRAY 597 25 "Nugeraian", and according to CAPELL 121 79 ff "Inhungerain". 3) INGLIS 402 31. 4) See DEACON 184 705 ff.

and his brothers, was fair-skinned and his hair was yellow; Qat's sister's children in Maevo were light-skinned (see the ogre story) and in the analogous ogre story of Tanna, the children saved by Matiktiki were white-skinned too. These facts, combined with the identification of Qat with the first Europeans, entitle us to conclude that Qat of the Banks Islands was light-skinned himself too. This is also the opinion of IVENS, who, discussing the identification of Qat with the Europeans says: "When Europeans in the persons of Bishop G. A. SELWYN and Bishop PATTESON first visited Mota Island in the Banks Group, they were taken for Qat. It was said Qat has come back again. Dr. CODRINGTON gives no reason for the association of these white visitors with Qat in the native mind, but if Qat was supposed to be white, like the Ambat ... we have the reason for the association of the white visitors with Qat at Mota. Apart from this supposition there seems to be no reason for the association"¹). Furthermore the Ambat of Seniangu, Lindanda the wife of Ambat, and Hambat of Lambumbu were white-skinned. Marrélül, the brother of Barkulkul (South Pentecost) whose association with the Qat-Ambat mythology we have shown, was called "le devenu blanc"; the ruins of Cape Cumberland were said to have been erected by white people; Tumbo na Toru (Epi) was identified with the Europeans like Qat and Ambat, and in the same way on Erromonga all foreigners were called by the name of the culture hero "Nobu" who was certainly light-skinned too. The faces of the sky-women, whose association with Qat and Tagaro is in many cases obvious, were "far fairer" than those of the people on earth. There is no direct mention in the myths that Tagaro was light-skinned, but this we can conclude from the following: In the Mangaian story of Tangalua this hero is said to be fair-haired, and all fair-haired children are the "fair haired children of Tangalua". White men when first seen in Mangaia were considered to be offsprings of Tangalua²). A marked resemblance in detail between the light-skinned Ambat and some of the Polynesian traditions has been pointed out by LAYARD. He instances the belief among the Maori of a race of atua called Pakehakeha, who were said to live on the sea, and were white in complexion. Hence they gave the name Pakeha to the first white men with whom they became acquainted³).

We have now to ask what associations have Qat, Ambat, Tagaro, etc. with stone-work entitling us to maintain a genetic relation between stone-work and these light-skinned culture heroes. Qat's mother in the Banks Islands is a stone; the tenth fair and yellow-haired child of Maevo whose association with Qat we have shown, also came out of a stone to which he finally returned; Tagaro of Maevo builds a stone wall round his pool which later becomes the sea, and this was also done by the wife of Tangalua on

1) IVENS 407 50. 2) CAPELL 121 62, LAYARD 468 219. 3) LAYARD 468 218 quoted also by IVENS 407 50.

Tanna¹⁾. Tahar of Atchin is at once a stone, the sun, and the moon, and he has ten petromorphic brothers standing on the shore. The connection with stone-work appears most clearly in Malekula. On Tomman Island the home of the Ambat, the famous monolith, the "Penis of the Ambat" is found²⁾. According to the story of Mewun, Kabat Butwanabaghap was buried in the logho place in a sitting position in a double dolmen covered by a tumulus. His two sons procreated the tagha stones which now stand in the logho of Melpmes. Each tagha stone had a child bearing a name with the prefix Kabat. The two sons of Kabat Butwanabaghap were buried in pits in a sitting position surrounded by stones. The magicians are still buried in this manner to-day, since they are regarded as the direct descendants of the Kabat, the only difference being that the position is prone. Furthermore, it has been seen that most of the megalithic stone-work was erected in connection with the graded societies which extend from the Torres Islands to Fate Island. It is significant that in the Southern New Hebrides where there are no secret societies, no stone-work is recorded with certainty apart from stone walls round villages and gardens. In the graded societies the erection of stone-work is most frequent in the higher or highest ranks. The connection between stone-work and Suqe follows also from the fact that in almost all cases the various types of stone graves were usually made for men of high social status, i.e. men of high Suqe rank (Torres Islands, Venua Lava, Meralava, Aoba, Pentecost, Santo, Vao, Port Stanley, Fate). The only exceptions to this rule, are, South Malekula and Ambrym, the latter of which is strongly influenced by the Malekulan culture: here stone graves were made for men of middle ranks in the Suqe; but in South Malekula and Ambrym instead of stone graves the effigies rambaramp were made for high Suqe men and were significantly said to have been introduced to Malekula by the Ambat. These are apparently the reasons why DEACON attributed the secret societies Tamate, Nalawan, Nevinbur, Suqe, Nimangki, Menggi, Maki, etc. to the same culture as that to which, according to him, the megaliths and the Qat-Ambat mythology also belong. This culture complex is called by DEACON the "Secret Society Culture"³⁾ in which he closely follows the scheme of RIVERS⁴⁾. It must, however, be admitted that we have no direct proof of the connection of Qat-Ambat-Tagaro with the secret societies. DEACON records a myth of Senieng according to which Nevinbumbaa (the black woman of Ambat according to one version and the ogress according to the other) was the first person to make a Nimangki fire⁵⁾. The Senieng myth, recorded by LAYARD, according to which a man Atimis Malau was the first to introduce two boys into all ranks of the Nimangki after they had pulled him out of a

1) A parallel to this creation of the sea is the myth of South Pentecost, according to which the wife of Barkukul gave seawater to him and his brothers. In Aoba, Epi and Fate the sea was fenced in by a woman. 2) DEACON 184 635, 672.

3) 184 705. 4) See RIVERS 725 II 212. 5) DEACON 184 627.

hole, reveals even less connection between the Ambat and the secret societies. The crab called *mbumba-au* which the boys had pulled out of the hole before *Atimis Malau*, is certainly reminiscent of the name *Nevinbumbaaau*, but we learn nothing else regarding this crab ¹⁾. LAYARD who has remarked upon this lacuna thinks that for the connection of the Ambat with the *Nimangki* society "a hint may be contained in the special mention of the *mbetep...* (bread-fruit) tree ... of which the images in the stone-using degrees are made, as being one of those planted by the Ambat on their new island" ²⁾. It will further be remembered that in the *Tanna* story of *Matiktiki* and the ogre, which agrees completely with that of *Qat* of the *Banks Islands*, *Matiktiki* saved the white children by shutting them up in a bread-fruit tree. Perhaps it may also be added that the stake with which *Kabat* of *Mewun* killed the giant clam was of "nator" wood ³⁾, which was also used for the wooden images of ranks 3, 9, and 10 in *Seniang*. But in my view these details prove very little indeed.

We have collected a large amount of material with regard to sacred plants, such as *croton*, *dracaena*, *cordyline*, *cycas*, *casuarina*, *erythrina*, and, in some cases coconut leaves and *hibiscus*. The association of these plants with the secret societies and stone-work is so frequent that their genetic connection is beyond doubt. On the other hand, we have seen that no importance was attached to these plants in the most southern New Hebrides where there were neither secret societies nor megalithic stone-work. The plants were used as badges in the secret societies, as stakes to which pigs were tied, as taboo signs for men of high *Suge* rank, as ceremonial decorations, for ceremonial counting of sacrificial pigs, counting the days after a death, etc. In some cases even the ranks bear the names of the *cycas*, the *cordyline*, etc. and in *Tismulun* (*Santo*) even the secret society as a whole is called "Mele", i.e. "*Cycas*". All these plants were planted round the stone-work erected in connection with the secret societies, round the stone graves and houses of high *Suge* members, or around the gamals and on the dancing ground. Furthermore, they were used as tokens of peace, in magic, etc. ⁴⁾. The myths offer actually very little direct evidence for the connection of sacred plants with the megalithic *Qat-Ambat-Tagaro* culture. It is therefore all the more significant that the tree which *Qat* planted in the *Banks Islands*, and which he let grow into the sky to save himself and his brothers from the pursuing ogre was a *casuarina* ("aru"); in a similar

1) See LAYARD 468 175 f; neither has the story of "*Temes Malau*" of *Seniang* recorded by DEACON 184 728 f any connection with the Ambat or with the secret societies. 2) 468 217. 3) DEACON 184 629. 4) In this regard it is DEACON too who has tried for the first time to define the culture to which the use of sacred plants belongs. To his "Secret society culture" he also attributes the cult of *croton*, *cycas*, *cordyline* and *erythrina*. 184 705 ff. In our work 719 we compiled for the first time the data regarding this problem for the whole of *Melanesia*. The importance of the *cycas* palm in the ritual of the secret societies of the *Banks Islands* has been pointed out by RIVERS 725 II 533, 535.

way Matiktiki saved himself and the white children in the analogous story of Tanna by climbing a casuarina ("nil") and, according to the version of Gaua, Qat made men out of a dracaena.

With regard to the coconut which is of much less importance, however, than the other sacred plants in the ritual of the Suqe, there is considerably more direct evidence in the myths to prove its connection with the Qat-Ambat-Tagaro culture. The coconut palm was among the food trees which Ambat planted upon his artificial island Tomman. Ambat Kinbal of Senieng came to Tomman Island, stole some of Ambat's coconuts, and bringing them to Senieng, he introduced the coconut to the mainland of Malekula. It was also said that Tahar of Atchin introduced the coconut to this island. In many cases we find the very widespread theme of the springing of the coconut from the skull of the culture hero. In Lambumbu (Malekula), after the death of Hambat in the village of Lembelag where he had lived, the coconut, also called Hambat, sprang from his skull. For this reason the coconut trees are of intense sanctity in this district and on no account may be cut, neither must copra be prepared here for the same reason¹). In Tanna and Aniwa where Tangalua (Tanna) or Tangaroa (Aniwa) is represented as a snake, the coconut springs from his skull after his death. On Hiw Island (Torres Group), Big Nambas, and Epi the coconut springs from the skull of a snake, and although we are not told of any association of these snakes with the culture heroes, such an association is highly probable if compared with the myths of the other islands. Furthermore, the belief that the coconut originally sprang from the head of a snake is found all over Polynesia²). It is also significant in this connection that, according to the myth of Maevo, Tagaro's coconuts increased as he ate them and dry nuts out of which he scooped the meat filled again. That Barkulkul of South Pentecost and his five brothers, whose association with Qat-Ambat etc. has been pointed out, came out of a coconut, perhaps supports the view that there is a connection between the coconut and the stone-using immigrants. LAYARD records that "there is definite evidence for the quite recent spread of the coconut from south to north up the east coast of Malekula. On the west side of the island, not far north of South-West Bay there is a stretch of about 5 or 6 miles of coast where, owing to the steepness of the cliff, there are no coastal villages, but an inland population which until recently was very numerous and very wild. Here there are no coconuts ... Of course it is possible that there may be lack of suitable soil or some other reason, but this is unlikely, as the coconut will grow almost anywhere in Malekula"³). DEACON also mentions that, according to tradition, the coconut was introduced into Lambumbu from Lagalag in the east⁴). In the region of the short people of West Santo where the Suqe has hardly obtained a footing⁵)

1) DEACON 184 187, 656 f. 2) HARRISON 342 115. 3) LAYARD 468 217 Note 3.
4) 184 187. 5) SPEISER 789 162, 297.

the coconut palm is not very frequent¹). That there too the coconut palm is of recent origin is also the opinion of HARRISSON²).

RIVERS has expressed the opinion that the pig was introduced by the megalithic immigrants³). DEACON has slightly modified this view and attributed the sacrifice of pigs to his "secret society culture". I can see three reasons for these opinions. First, we have repeatedly seen that the pig-killing rites were most strongly developed in the graded societies whose connection with the megalithic culture is obvious. Secondly, we have found that the pig is of no importance in the Southern New Hebrides where the secret societies are non-existent. On Tanna Island, where there is no secret society, the pig is only "verkümmert vertreten" as SPEISER puts it, and in New Caledonia whose culture contact with the Southern New Hebrides has been pointed out, we know that there is a complete absence not only of the secret society but also of the pig. The third proof—the most important since the most direct—is furnished by mythology again, although our sources are not very rich in this regard. The clearest information we have is from Atchin Island, where it was said that Tahar introduced the pig. In Maevo and Aoba, where Tagaro was considered to be the creator of all things and men it was said that he also created pigs, and Kabat of Mewun, the creator of many things, was said to be the creator of the domestic animals. It must, however, be admitted that, since these two latter culture heroes are said to be the creators of all things and men, the mention of the pig in their work of creation is less explicitly stressed. On Maevo is said that Tagaro departed from the island, because someone stole his pig. Perhaps it is not without significance in this connection, that the original order, according to which men went on all fours and pigs on two feet, was changed in several instances by these culture heroes. This was done by Qat in the Banks Islands, by Tagaro in Aoba, by Vyu Yotab in Ambrym, and this theme appears too on Erromonga where the culture hero is Nobu, but the old order here was changed by a lizard. From South Pentecost TATTEVIN records a myth of a man named Wahger. Once when climbing a tree, Wahger tore his testicles. These swelled, and out of them came pigs which were formerly unknown to mankind⁴). Apart from this nothing is known of Wahger which would entitle us to associate him with the culture heroes Qat, Ambat, Tagaro, etc. But does not the name Wahger point to some connection with "Wuhngin", the creator of Tanna?

I cannot answer this question so long as we know so little about this mythical being Wahger, but we have already shown that there are strong mythological connections between Tanna and the Northern New Hebrides. The Fate myth, according to which yams, pigs, etc. came down from heaven, is also important for our problem. From the Fate version it is not quite clear whether this was due to the creator Mautikitiki, who appears

1) SPEISER 790 133. 2) 342 115. 3) 725 11 461. 4) TATTEVIN 856 (1931) 489 f.

here beside Takaro and Supu, or to the two sons of a man by a sky-woman. However this may be, it is clear that the introduction of pigs was attributed to the sky-people. This is confirmed by the Tanna myth, according to which the sky-woman Masineruk let pigs down from the sky to the earth on a long line.

We have seen that in many cases the sky-people were identified with the culture heroes of the stone-using immigrants, or were at least closely related to them. Thus the winged woman of the sky is married by Qat in Maevo, and by a man in Mota and Meralava who is probably Qat also. In Aoba she is married by Tagaro (in South Pentecost, Fate and Tanna by an ordinary man whose name is not indicated). The sky-woman of Maevo creates yams, bananas, etc. by touching these things; in Fate the sons of this sky-woman let down yams from the sky; in Tanna yams and pigs are introduced by the sky woman. In North Pentecost Tagaro came down from heaven; Yetar of the Sakaos, Tautai of Tismulun, Sori of Nogugu, probably Sotitetai of Tangoa Island, Tagar of Vao, Hambut of Lagalag and Supu of Fate live in the sky; Takaru of Malo rules over the sky afterworld; Vyu Yotab of Ambrym lives "on top" which evidently means the sky, and Moshikishiki of Futuna, whose adventures with the ogre agree completely with the story of Tanna and that of Qat of the Banks Islands, saved himself and the children from the pursuing ogre by climbing into the sky on an almond tree.

The disposal of the dead in the Ambat culture and a few other problems.

In the myth of Mewun already mentioned it was said that Kabat, who had been buried in a dolmen covered by a tumulus, "was arranged in a sitting position, the hands resting on the knees" ¹). In the same way the two sons of Kabat were buried in a sitting position (in pits surrounded by stones) ²). In both cases jars or cylinders of the prehistoric sacred pottery were placed on the head, knees and at the buttocks. This mythological record has found its strongest confirmation by the very important discovery of SUAS who found dolmen graves on Ambrym in which the dead were arranged in a sitting position also, and in which furthermore, potsherds were also found (with regard to the necessary criticism of the text see before). The identity with the dolmen grave of Kabat in Mewun is thus complete. The fact that the bones and the potsherds found by SUAS were very fragile is a proof of the great age of these remains. We have previously shown to what extent Ambrym has been influenced by the megalithic culture, that megalithic stone-work, the secret society and the Ambat mythology (in the persons of Barkolkol and Vyu Yotab) occurred here, and that the graded society particularly was influenced from Malekula. All these reasons entitle us to attribute to the Ambat immigrants SUAS' dolmen-graves with their sitting position of the dead, and we can thus draw the conclusion that burial in the

1) DEACON 184 631. 2) DEACON 184 633.

sitting position belongs to the culture of the Ambat and was introduced by them.

To-day burial in the sitting position is usual in the following islands of the New Hebrides: on Gaua, women are buried in the sitting position¹⁾; in North Malo, men of high rank are buried in the sitting position²⁾; in Big Nambas, "with a chief the legs are bound up to the thighs and the lower arms to the upper arms with the hands crossed on the chest. The grave is a pit ... In this the corpse is placed in a kneeling position, the head projecting above the surface of the ground, with leaves or stones placed around the neck, so that it may not come into contact with the soil"³⁾; on Vao, members of high Suqe ranks are buried "in kauender Stellung"⁴⁾; on Ambrym of to-day, ordinary people and women are buried in the sitting position⁵⁾. Regarding Tanna Island, HUMPHREYS records⁶⁾: "A case is recalled by the chief of a village where the body was interred in the ground, but in a sitting position, with the knees flexed", and SPEISER also saw here an old niche grave: "Der Körper war darin deutlich in Hockerstellung beigesetzt worden"⁷⁾. On Aneityum, women and ordinary men are buried in the sea, but chiefs are buried in the ground with their heads projecting above the surface of the ground⁸⁾. Unfortunately the information regarding the position does not all coincide. Whereas HUMPHREYS says that they were buried "in an erect position"⁹⁾, which information is confirmed by SPEISER who says that chiefs are buried in an erect position with their heads above the ground¹⁰⁾, GUNN¹¹⁾ records that "the body was laid in a sitting posture in a few inches of earth. When much decomposed, the body was covered with earth." In view of the fact that burial in the sitting position with the head projecting or not projecting above the ground, occurs in New Caledonia, it would not be astonishing to find this type of burial on Aneityum also. The fact that on Malo and Vao it is only usual for men of high rank, and for the chief in Big Nambas and Aneityum, to be buried in the sitting position, is exactly what we must expect if burial in the sitting position was introduced by the Ambat. Against this the fact remains, however, that on Gaua, burial in the sitting position was usual for women only, and on Ambrym for women and ordinary men. It is evident from this survey that the present distribution of the method of burial in the sitting position in the New Hebrides does not permit us to draw any definite conclusion as to the culture to which this mode of burial belongs. How much customs can change, even where very close connections with the old order still exist, we have seen clearly in the disposal of the dead magicians of Melpmes in Mewun. Since the magicians were regarded as the direct descendants of the Kabat, they were buried in pits surrounded by a circle of stones like the

1) SPEISER 789 309. 2) SPEISER 789 306, 793 76. 3) DEACON 184 582 f. 4) SPEISER 789 306. 5) SPEISER 789 307. 6) 398 89. 7) 789 310. 8) LAWRIE 467 711, BROWN 102 396, SPEISER 789 311 from MURRAY 597. 9) 398 111. 10) 793 190. 11) 313 214 quoted also by SPEISER 789 311.

sons of Kabat themselves, but with the very important difference that, whereas the Kabat sons were buried in the sitting position, the magicians of to-day are buried prone. There cannot be any doubt that to-day the extended position is the most usual type of burial in the New Hebrides. This may warn us against basing an investigation of culture contact on the geographical distribution alone. However important and right this principle may be, it should be supported, if possible, by other proofs. But on the basis of the mythological and prehistoric proofs which we have given, we can conclude that burial in the sitting position forms part of the Qat-Ambat-Tagaro culture. The magicians who in Lambumbu performed the fertility rites of the pigs, which rites DEACON has shown as having been introduced by the Ambat, Hambat, etc.¹⁾ receive a burial which differs from that of ordinary people. Their bodies are placed in the ground in a prone position, but their heads are left projecting, for it is greatly feared that the earth might come into contact with the head of the magicians²⁾. All adult males of the Lembelag clan of Lambumbu may perform the fertility rites of pigs and so receive the title of Hambat. Those who bear this title are distinguished from the common people in their funeral rites. These Hambat, like the clan magicians, are buried in such a way that the head is left exposed³⁾. In view of these facts, it is probable that burial with the head exposed above the ground, which in some cases was connected with burial in the sitting position, also belongs to the culture of the Ambat.

We must now turn to the very important problem of the prehistoric pottery. As is well known, Santo is the only island of the New Hebrides in which pottery is still made to-day. We have seen that, according to the Mewun story, Kabat was buried in a dolmen, and that on the head, the knees and at the buttocks jars or cylinders of the sacred prehistoric pottery were placed; and the same was done with the sons of Kabat. On the logho place of Melpmes (i.e. the sacred place corresponding to the membrmbrkon of Seniang, the place where the bones of the dead were deposited) on the spot beneath which the two Kabat sons were supposed to be buried, there were three of the sacred pots. This shows the close connection between the Ambat and the prehistoric pottery. In Seniang, pieces of prehistoric pottery and jars and cylinders were found in the sacred place (membrmbrkon), and the people attributed them to the Ambat. They are called naamboi and are used to-day in the magic for increasing pigs⁴⁾. All these jars and cylinders are of rough coiled earthenware⁵⁾. The largest jar mentioned by LAYARD is 1 ft. 5 inch. long and 7 inch. wide⁶⁾ and a large pot mentioned by DEACON is 1 ft. 7 inch. long and about 10 inch. in diameter⁷⁾. The pots collected by LAYARD and DEACON show incised geometric designs and representations of the human form. One fragment found in Worvulu village (South coast),

1) 184 637, 661. 2) DEACON 184 612. 3) DEACON 184 657 f. 4) DEACON 184 597, 599 f, 694, 617 f, LAYARD 468 141, 210-213, 215, 218, Pl. XVIII fig. 3, 469 517 Note 1. 5) LAYARD 468 210, DEACON 184 713 f. 6) LAYARD 468 210. 7) DEACON 184 fig. p. 648.

was also called naamboi and had a deeply incised human face "one might even say sculptured, the depressions being from $1/6$ to $1/4$ of an inch deep" ¹). On the sacred place of Iumoran village on Tomman Island, the home of the Ambat, are said to be the largest specimens of the sacred pottery here called naamboi also. They are used in fertility magic. In Lambumbu there are sacred pots of the same kind, here used in the magic for bread-fruit. Here again there is some idea that this prehistoric pottery is connected with Hambat. Specimens of this sacred prehistoric pottery are found at the village of Langandu (Lagalag District) too, here called nughumbe and used in the magic for bread-fruit. This pottery has even been found on the sacred place of Lembelag, in the inland district of Nesan, where it is used to-day in bread-fruit or rain magic ²). In the Big Nambas region prehistoric potsherds were used in magic for bread-fruit ³). SPEISER, who made excavations on Vao Island found prehistoric potsherds at a depth of 10 inches, and on the surface of the ground also. With regard to the technique he says: "As far as can be judged they were not made by the coiled technique". SPEISER has expressed the opinion that all the prehistoric potsherds of the New Hebrides were exported from Santo, a supposition which is, however, refuted by the mythological connection of the prehistoric pottery of Malekula with the Ambat. But these myths were not known to SPEISER when he published his work *Ethnographische Materialien*. SPEISER thought that the potsherds of Vao must have come from Wus where the modelling method is usual. But SPEISER must himself admit that the potsherds of Vao differ from the Santo pottery in their ornamentation. The sherds bear geometric incisions and deep depressions ⁴). Indeed, this kind of decoration makes the connection with the prehistoric pottery of Malekula almost certain. As far as SPEISER's information is concerned, it must be said that it is very difficult to determine the technique if based upon potsherds only, and indeed SPEISER's opinion is not expressed with much emphasis. DEACON and LAYARD have collected complete jars, and their information that these pots were made by the coiled method therefore must be considered conclusive.

FINSCH reports ⁵) that "there are pots in the Cologne Museum from the Banks and the Torres Islands (collected by JOEST)", but he does not give any details. SPEISER says that he himself has found no potsherds in the Banks Islands, but some Europeans in the region asserted that pottery was formerly made on Gaua Island ⁶). On Aoba, Glaumont found a stratum of volcanic sand 10 inches thick at the depth of 5 feet and beneath it potsherds without any ornament ⁷). Suas, who also mentions these potsherds, says that they were "ornées de jolis dessins" and commenting on the large size

1) DEACON 184 713 Pl. XXIV, 27.2190 A. 2) DEACON 184 601, 612 f, 615, 637, 640, 671. 3) DEACON 184 613, see also SOMMERVILLE 786 387 f. 4) SPEISER 789 18-20, 22-24, 82, Plate 65. 5) 236 276. 6) 789 257. 7) 289 228, 290 49 f, quoted also by SCHURIG 841 34 f and SPEISER 789 256.

of these pots he says: "En prenant avec un compas la courbure de quelques uns de ces débris de marmites, et en reconstituant le cercle entier, on arrive parfois à un diamètre de 0.50 m, 0.60 m et plus. Une marmite de cette dimension serait aujourd'hui un meuble absolument inutile et encombrant" ¹⁾. JOLY mentions potsherds on Pentecost ²⁾, and FINSCH remarks that the ornaments of these potsherds and those of Ambrym resemble those of the potsherds found in Collingwood Bay and on Dauko Island ³⁾, a remark which is all the more important as we shall find good reasons for attributing these potsherds of New Guinea to the culture of the stone-using immigrants.

With regard to the potsherds found in the dolmen graves of Ambrym, SUAS says that the natives proffered the information that the people buried there in the sitting position were the makers of this pottery. Having reached the conclusion that burial in the sitting position forms part of the culture of the Ambat, and having noted that the Ambat were considered to be the makers of the prehistoric pottery in Malekula, and that in their stone graves (dolmen or stone circle) potsherds were placed on the head, the knees and the buttocks, it is now evident that the dolmen grave of Ambrym with its prehistoric potsherds belongs to the same culture as in Malekula. The close contact between Ambrym and Malekula in other respects also has previously been pointed out. Unfortunately we learn nothing regarding the exact position of the potsherds in the Ambrym graves.

Fate Island is the most southern point of the New Hebrides where prehistoric potsherds were found in great number ⁴⁾. A single complete pot which MIKLUCHO-MACLAY saw was "ausgezeichnet verziert". Potsherds were further found on Nguna Island near by, on Emae Island and Mai Island in the north ⁵⁾. In a myth of Fate, the origin of the prehistoric potsherds is explained in the following way: When the world was quite new and still in movement Lei Mautikitiki, the wife of Maui was carrying home some water in jars, but, owing to the rocky state of the land she spilled the water, which made her so angry that she threw the jars on the ground. The broken pieces of pottery are known as the water jars of Lei Mautikitiki and are held in great reverence by the natives ⁶⁾. This myth is of the utmost importance for the problem of the prehistoric pottery. We have seen before that Lei Mautikitiki corresponds to the wife of Qat of the Banks Islands who was also called Lei. Besides this, we have seen that in the Southern New Hebrides the place of Qat, Tagaro, Ambat, etc. is taken by the Polynesian Maui, but that the themes of the myths of the

1) SUAS 808 201 f. 2) 419 365 quoted also by SCHURIG 841 34, FINSCH 236 275, 3) 236 276. 4) MIKLUCHO-MACLAY 571 576 f; in Iririki they were found by SPEISER 789 94, see also HADDON 329 268, SCHURIG 841 35. 5) MACLACHLAN 522 32 f BÄSSLER 35 203 mentions the present use of clay pots on Mele Island, but this expression is so indefinite that we cannot gather whether native pottery is meant. 6) ELKINGTON 226 176, MACDONALD 516 150, SPEISER 789 256, SOMMERVILLE 786 379, CAPELL 121 68 f, SCHURIG 841 35.

southern islands agree in many respects, even to details, with those of the Qat-Ambat-Tagaro mythology. It therefore follows that Maui also belongs to the same stone-using immigrants as Qat, Ambat, Tagaro, etc., but that he subsequently came to the Southern New Hebrides from Polynesia which he had reached coming originally from the west. We have seen that the prehistoric pottery of the New Hebrides must be attributed to the culture of the stone-using immigrants. Now, in Fate the fact that Lei Mauitikitiki is described as using earthenware jars from which the prehistoric potsherds originated, is only what we might expect, since this mythological woman belongs also to the Qat-Tagaro-Ambat mythology, that is, the mythology of the stone-using immigrants. That these sherds were held in great reverence by the natives of Fate, corresponds to the fact that they were used in magic and deposited on the sacred ground in Malekula.

It is of course possible that in future potsherds may also be found in the more southern islands of the New Hebrides, although HUMPHREYS says clearly that there is no evidence of potsherds in Tanna¹⁾. Should this be so, it would correspond to the fact that elements of the Qat-Tagaro-Ambat mythology also have extended primarily or secondarily to the southern islands. But on the other hand, it is of the utmost significance that, according to our present knowledge, the most southern point where potsherds were found is Fate, since we know this to be the most southern point to which the Suqe spread. If, as we have shown, the prehistoric coiled pottery and the Suqe were brought by the Qat-Ambat immigrants, we must expect the distribution of both to be the same. SPEISER who, as we have already mentioned, had not then at his disposal the mythological material, and who could therefore not then recognize the culture to which the prehistoric pottery belongs, thought that there existed "a trade route leading from the potter villages on Santo via Malo to Vao from where the pots spread along the east coast of Malekula and reached Epi and Fate".²⁾ But there is no basis for the supposition that such a trade route existed. I shall not discuss the present trade relations of Santo, since they would prove very little regarding the distribution of this ancient pottery. But it should be mentioned that HARRISSON says of the west coast of Santo³⁾: "These pots are bartered to and fro inland as far east as the Yora and Lambe valleys", and ECKARDT⁴⁾ says in a very general manner: "Santo is the only island of the New Hebrides on which earthen pots are made which are also highly appreciated on the other islands". I think we must agree with DOUCERÉ who says of the New Hebrides⁵⁾: "Autrefois cette industrie de la poterie a dû exister plus ou moins à peu près partout dans nos îles, car partout on en trouve des fragments en abondance. Sans doute, parfois, c'était par le commerce que l'on se procurait ces poteries; mais un examen de ces fragments prouve d'ordinaire que c'est le produit d'une fabrication locale. A quelques lieues de distance la couleur varie, et elle varie très

1) 398 65 f. 2) 789 256-258, 791 463. 3) 343 249. 4) 209 59. 5) 201 17 f.

évidemment avec la nature même de la terre du pays". We shall discuss later the use of two different methods at two places such a short distance apart as Wus (modelling method) and Pespia (coiling method) on the west coast of Santo¹), which has embarrassed many writers.—Let us now sum up the results obtained: the stone-using immigrants Qat-Tagaro-Ambat etc. introduced the coiled pottery which they used as sepulchral pottery also. These pots were apparently very large. Apart from geometric incisions they are also decorated anthropomorphically, often by means of deep incisions which have almost the character of sculpture.

We shall now pass on to the very interesting problem of stone bowls. Every student of Melanesia is well aware of the difficulty of this problem in Melanesia. As far as I know, no compilation of the material of the whole of Melanesia has been made up to the present and the data collected by CHINNERY²) apply to British New Guinea only. The resemblance of these stone bowls with those of Polynesia is of course too obvious to be overlooked; they have been accordingly attributed by several writers to the Polynesians who were said to have left these artifacts behind when passing through Melanesia on their way to Polynesia. But this does not solve the problem, since nothing was known with certainty about these migrations. CHINNERY has in fact attributed to the culture of the stone-using immigrants of British New Guinea the stone mortars and pestles, stone circles, stone figures, obsidian implements, prehistoric potsherds, petroglyphs, etc., but he did not show the genetic connection of all these things with the megalithic culture. His opinion is more than likely based upon the fact that most of these things represent "stone-work" which has this in common: that it cannot be attributed to any of the existing cultures of New Guinea, and is unknown to the present natives. Now, a Seniang myth relates "that Nevinbumbaau went to Tomman Island and there saw Ambat making a pudding. He was using a stone with four handles, of a kind not known to-day, and this she managed to steal from him. But Ambat, discovering his loss, pursued her and recovered his property"³). Here we see Ambat in the possession of a stone bowl. GLAUMONT⁴) makes the following remark regarding stone bowls of "Malekula" unfortunately without more precise indications as to the place: "J'ai trouvé plusieurs pierres, dites cupuliformes, semblables à celles que j'avais déjà rencontrées en quelques endroits de la Nouvelle Calédonie. J'en ai emporté une, ainsi ornée à sa surface convexe et creusée sur l'autre face d'une grande cuvette régulière de 20 cm de diamètre. Les indigènes auxquels j'ai montré cette pierre en ignorent complètement l'usage". SPEISER has considered this description lacking in clarity and he therefore thinks it improbable that these stones could agree with the stone bowls of Gaua. But I cannot help thinking that GLAUMONT's description

1) See SPEISER 789 256-259, 790 148 f, fig. 40, ROBERTSON 731 141, RAY 698 707, FINSCH 236 277, SCHURIG 841 106 f, etc. 2) 151. 3) DEACON 184 627. 4) Quoted by SPEISER 789 95.



The geographical distribution of the Megalithic Culture and its migrations in the New Hebrides.

speaks clearly enough of stone mortars and the mention of the mortar in the Malekulan myth supports this view. The stone bowls of Gaua have already been described. HARRISON mentions "stone pudding-basins"¹⁾ which, according to him, are confined to Big-Bay, Santo. SPEISER²⁾ gives a picture of a "Steinschale, Nordwestsanto, angeblich zur Kavabereitung". I am not aware of any other information about stone bowls of the Northern or Central New Hebrides.

SPEISER³⁾ shows a picture of a Tanna stone bowl "Zum Füttern der Schweine", and PATON⁴⁾ speaks of the depression of a stone found on the same island into which human blood was poured as a sacrifice to a spirit, but it is not absolutely certain from this description that it was really an artifact.

This shows that our knowledge of the geographical distribution of stone bowls in the archipelago is not sufficient to draw any definite conclusion. On the other hand, the fact that Ambat was in possession of a stone bowl makes it very probable that these bowls belong to the culture of the stone-using immigrants⁵⁾. That this is actually the case will be seen still more clearly later on.

We have now finished our study of the New Hebrides, although the elements mentioned do not by any means represent the totality of the megalithic culture. Many other questions for which a wider basis is necessary must be discussed later, thus for instance the problem of terraced irrigation, the connection of the stone-using immigrants with RIVERS' Kava-people, the problem of the sun cult, etc. etc.

TIKOPIA AND SANTA CRUZ

Tikopia: If we also consider Tikopia Island as coming within the scope of our investigation, it is only because of certain connections which it has with Melanesia. In race and language, however, the Tikopians are purely Polynesian⁶⁾.

According to the native tradition, the present population of Tikopia is the result of the commingling of a number of stocks from Tonga, Samoa, Rotuma, Uvea, and other Polynesian islands to the east, and from Melanesian islands in the Banks Group and Santa Cruz and even Ontong Java to the west⁷⁾. Trading relations exist with many remote islands, particularly

1) 344 333. 2) 789 Pl. 26 fig. 8. 3) 789 Pl. 26 fig. 10. 4) 643 123.
5) A similar opinion has also been expressed by HADDON, who says (In SHERWIN and HADDON 781 162): "If the stone bowl collected by the Rev. V. H. SHERWIN (on the west coast of New Britain) was similar to that of Ambat, then it possibly may be a relic of the Qat-Ambat migration into Melanesia". 6) GRAEBNER 299 72, 180, CODRINGTON 162 264, 163 32, RAY 705 50, RIVERS 725 I 303, II 234, SPEISER 790 304, 791 465, 792 288, FIRTH 243 2, 12, 16, 164, 245 64, 246 105, etc. etc. 7) FIRTH 243 3, 32, 362 f. 387, 245 117, 246 116 f, RIVERS 725 I 334, DILLON 195 II 14, 112, GRAEBNER 299 180.

with Anuta Island, Vanikoro, Reef Islands, Nitendi, and Sikaiana, and even Renell Island was visited by one chief ¹). CODRINGTON, during his sojourn on Mota Island of the Banks Group, witnessed the arrival of several Tikopian canoes, the crews of which were most kindly treated in Mota; people on a voyage from Anuta Island to Tikopia were blown to Motalava ²). According to a Hiw Island myth (Torres Group) a coconut floated from Hiw Island to Tikopia and therefore the coconuts of Tikopia are very big ³).

On the marae, the Polynesian dancing and ceremonial ground, stands the chief's house, and near it there are a number of upright stone slabs which represent the seats of the clan deities ⁴). FIRTH does not give more detail, and his photograph is not very distinct.

There are two stones ("gods"), one male (Te atua takaretoa) and one female (Te vatua maru), to which offerings are made. The male stone is the embodiment of the deity of Takarito ⁵). This is evidently reminiscent of Takaro.—When in the Tika game which is widespread in Melanesia and Polynesia, and which here has a religious significance, a very long cast is achieved "a stone is planted to mark the spot and to leave a record for the future generations with the distance accurately preserved" ⁶), but no details are given about this stone. Besides trees and bushes as boundary signs, FIRTH also mentions "an ancient boundary stone set in the ground" ⁷), but again without giving details.

Sacred Plants. The sign of taboo is a bough of any kind stuck in the ground to which the leaf of the cycas (longlong) is fastened by means of a coconut leaf ⁸). This is very closely akin to the New Hebrides, where we have often met with the ritual use of the cycas and coconut in the secret societies, and where, particularly, cycas was often used as the sign of taboo. The casuarina bears the general Polynesian name "toa" ⁹), but a ritual use is not recorded here. To make the arm of a man light for a tika, dracaena leaves (timea, ti = dracaena tree) are tied round the neck of the man. Dracaena leaves are used also for dancing decorations. In case of sterility a cordyline leaf is hung around the neck of the woman and a formula recited to the ancestors, and at a marriage cordyline leaves are put round the bride's neck. Cordyline leaves are also used for dancing decorations ¹⁰).

Mythological evidence. The Tikopia legend of creation is that two atua (spirits) named Tafiki and Metikitiki (this is reminiscent of Mauiitikitiki) were fishing from a canoe. The latter sat in the bows of the

1) FIRTH 243 20, 33 f, 81-84, 187, 297, 299, 349 f, 351, 357, 389, etc., RIVERS 725 I 322, 355, II 309, GRAEBNER 299 181, DILLON 195 II 21-23, 49, 83 f, 219 f. 2) CODRINGTON 160 6 Note I, 346, RIVERS 725 I 356. 3) DURRAD 205 III 198. 4) FIRTH 243 48, 58, Pl VIII B. 5) FIRTH 243 24, 49. 6) FIRTH 245 86. 7) 243 396, 401. 8) RIVERS 725 I 319, II 237. 9) FIRTH 243 22, 245 66. 10) FIRTH 243 150, 486, 560, Pl. I, 245 76, DURRAD 206 144.

canoe and paddled and the former let down his line and they drew up both together two stones from the sea. The stones gave birth to Tikopia which is regarded as the child of their union¹).

Since the gods live in the sky, Reani, the highest mountain peak, is held to be the place of descent of the gods when they come down²).

As will be noted the information regarding myths is very poor. We give them here for the sake of completeness, but refrain from any analysis.

Santa Cruz: This archipelago is formed of at least three groups, Santa Cruz or Nitendi, the Reef Islands north of it, and Vanikoro in the south. The cultures of these groups show only slight differences. Racially the inhabitants of Nitendi and Vanikoro are a mixture of Melanesian and Polynesian elements³). The language is Melanesian, but contains Polynesian words⁴). In the Reef Islands, although there are some Melanesian elements, Polynesian elements prevail in the race⁵). The language is Polynesian⁶). The three groups have trading relations with one another and also with Tikopia, Sikaiana, San Christoval, and with the Banks Islands and, according to FINSCH, even with Santo and Ambrym, but with the last named islands perhaps only owing to European influence⁷). It is not uncommon that canoes are driven to Ulawa and Malaita and return happily⁸). DILLON records the case of a canoe of Tongatabu which arrived in Vanikoro in 1788, but most of the crew were killed⁹).

The round family house, or women's houses, are built upon a stone foundation which itself stands upon the common village terrace of stone. Not only the entire village of the women, but also every single women's house is surrounded by high walls of coral slabs with an entrance at one side¹⁰). The quadratic men's houses are built upon stone foundations which themselves also stand upon the big village terrace of stone. Stone steps lead up to the doors¹¹). Besides these, there are special ghost houses which are usually near the men's houses. They stand within their own stone wall (Matema, Reef Islands)¹²).

Near the men's houses on the shore is always a round smooth dancing

1) RIVERS 725 I 315, 338 f, FIRTH 246 116. 2) FIRTH 243 28. 3) LAMILLARDIÈRE 452 II 266, WOODFORD 979 234, GRAEBNER 299 72 f, 181, DILLON 195 II 241, BUSCHAN 117 173. 4) GRAEBNER 299 72, 169 f, RIVERS 725 II 476, COOMBE 170 176, RAY 705 47. 5) COOMBE 170 195 f, GRAEBNER 299 73, 180, RIVERS 725 I 227 f, CODRINGTON 162 264 f, SPEISER 790 302, COOTE 171 150, O'FERRALL 622 228. 6) COOMBE 170 195 f, CODRINGTON 162 264 f, SPEISER 790 302, RAY 705 50. 7) GRAEBNER 299 112 f, FINSCH 236 482, CODRINGTON 160 294, SPEISER 796 189, 191, 203, THILENIUS 859 14, DILLON 195 II 80 f, COOMBE 170 197, WOODFORD 984 38 f, etc. 8) CODRINGTON 160 346. 9) 195 II 269, WOODFORD 984 28. 10) GRAEBNER 299 89, SPEISER 792 284, 796 170, 176, 790 295, COOMBE 170 188 and fig. p. 188 (Te-Motu Island). 11) SPEISER 790 292 Pl. 92 above, 293, 792 282, 796 174, O'FERRALL 623 Chapter "A Club House", COOMBE 170 187, for the Reef Islands see GIRIEUD et HERRENSCHMIDT 258 106. 12) COOMBE 170 199, SPEISER 796 173.

ground (nava) fenced round by a ring of huge slabs of coral set on edge, and coral boulders, and with three or four entrances ¹).

The whole village is built upon a stone terrace which, with a stone wall the height of a man, descends to the shore ²). COOTE ³) records the existence of a stone terrace which was interpreted by GRAEBNER as a wall surrounding a house ⁴) an interpretation with which SPEISER does not agree, declaring that a village terrace of stone was meant ⁵). Whereas it follows from the information and photos furnished by SPEISER that stone walls were erected only around the round women's houses (except the ghost houses of Matema Island), we are nevertheless in possession of information showing that other houses also are surrounded by stone walls. Thus DILLON, speaking of big houses of Graciosa Bay (Nitendi) which had "une porte à chaque extrémité et une de chaque côté", by which apparently men's houses are meant, says: "Chaque maison est entourée d'un mur en pierres sèches de quatre à cinq pieds de hauteur, et presque autant d'épaisseur, avec une seule ouverture servant de porte" ⁶). And BÄSSLER says ⁷): "The club houses are oblong in construction, whereas living houses are, on the contrary, round. Both are surrounded by coral stone walls." Of Nufiole Island COOTE gives the following account ⁸): "From the club house we were taken by a chief to his private residence... This house was one of a small cluster, and a stone wall ran round it." Stone walls round houses are also mentioned by many other observers ⁹). It is of course impossible to decide whether these divergencies of opinion are due to difference in locality or date of construction, or whether some of the accounts are inaccurate.

SPEISER thinks it is probably the village terraces of stone which have caused earlier visitors to speak of fortified villages, but he also says that every village is surrounded on the land side by a stone wall of the height of a man. These walls form a semi circle round the village and, continuing over the reefs, often extend far into the sea. Steps lead over these walls from one village into another ¹⁰). The ends of these walls often form big bastion-like monuments built up by coral blocks on the reefs, the purpose of which is, however, unknown ¹¹). Regarding these bastion-like monuments SPEISER says ¹²): "If they were more extensive one might suppose them to have been places of refuge in times of war, corresponding to the artificial islands which are found on Taumako and Malaita". But he rejects this supposition "since they are no real obstacle to aggression; and since breast works are

1) SPEISER 790 295, Pl. 84, Pl. 92 above, 796 177, BROEK D'OBRENAN 98 126, COBRINGTON 160 324, 333, GRAEBNER 299 154, COOMBE 170 177, fig. p. 188 (Te-Motu Island), 202 f (Pileni Island, one for men and one for women), Pl. to face p. 205, O'FERRALL 623 Chapter "A Dancing Ground". 2) SPEISER 790 Pl. 87, 792 282, 796 174. 3) COOTE 171 162. 4) 299 91. 5) SPEISER 796 174. 6) 195 II 217 f, 230. 7) 36 394 f. 8) 171 154, 172 98. 9) See DALRYMPLE 178 194, D'ENTRECASTEAUX 298 372, DILLON 195 290, 301, DEWAR 194 248, GRAEBNER 299 91. 10) SPEISER 790 83, Pl. 84, 792 285. 11) SPEISER 796 Pl. 14, GRAEBNER 299 98 with references to the earliest literature concerning these structures. 12) 796 174-176, 790 297.

lacking, they afford no protection against arrows. It seems more likely that they were intended to support the village terraces which descend steeply to the sea. At the same time further ground was made available. Stone work was necessary to give strength to the slope and also to resist the heavy seas. But where the corals form a bank near the shore, this stone-work is non-existent". We shall see later however, that these "bastions" are probably a kind of artificial island, although it is not absolutely certain for what purpose they were erected. It is, however, very improbable that they were built for the sake of defence, and this is true also of all the other artificial islands of Melanesia as we shall see later.

The stone walls which surround the villages have been mentioned by many writers ¹⁾. COOMBE is of opinion that the main purpose of these stone walls was protection. MORESBY ²⁾ speaking of Duff Island is of the same opinion, and of Byron's Bay he says: the openings in the wall "are overlapped by other walls calculated to throw an attacking party into some confusion".

Since the villages lie usually very near to one another, narrow paths are formed which are bordered by the walls surrounding the villages. There is one exception to this rule viz. the village of Tapua, which has no stone walls ³⁾.

The gardens are surrounded by stone walls probably as a protection against the pigs ⁴⁾.

The points of contact with the New Hebrides are the following: we have found house foundations on the Torres Islands(?), on Ureparapara, Venua Lava, Mota Lava, Mota, Gaua, Meralava, Maevo, Aoba, South Pentecost, West Santo and Vao; in the northern part of the archipelago of the New Hebrides with which Santa Cruz has also trading relations, and in Erromonga in the south. We have found walls round dancing grounds only on Ureparapara, Aoba and Epi, unless the dancing grounds of Malekula, Vao, and Atchin which were surrounded by monoliths, can be included, but it is unlikely that we are entitled to include them ⁵⁾. We have seen that there were walls round villages in many of the New Hebrides, but that they were most highly developed on Gaua Island, where they bordered very long paths as is the case on Santa Cruz ⁶⁾. SPEISER has expressed the opinion that the big stone monuments of Gaua most resemble the bastions of Santa Cruz, although the former stand on the ground near the gamal. In spite of the various differences therefore it is not unreasonable to suppose that the greatest resemblances and the closest connections exist with the Banks Islands and the Northern New Hebrides. In view of the geographical

1) COOMBE 170 202 (Pileni Island), 198 Pl. p. 199 above (Matema Island: one village contains here five of these walled enclosures each containing two or three houses. The walls are 3-5 feet in height), BROEK D'OBRENAN 98 129. 2) 580 86; see also GRAEBNER 299 181. 3) SPEISER 796 175 (Matema Island), 176, 177, Pl. 15, Pl. 16. 4) GRAEBNER 299 99, SPEISER 796 185. 5) See SPEISER 793 24. 6) See also SPEISER 793 24.

proximity of the two regions, this is in fact most natural. SPEISER has discussed the problem of the culture contact between Santa Cruz and the Banks Islands. In support of this contact he mentions the house foundations of stone, the absence of cannibalism, the cult of the dead, weaving, and some other elements which are identical in both groups. But since, on the other hand, the divergencies are greater than the resemblances, SPEISER has drawn the conclusion that the resemblances go back to "elements which were exchanged between the islands in occasional contact" ¹⁾.

A particularly interesting construction was found by the Spanish discoverers in Taumako (Reef Islands). This was a small island entirely built up artificially of coral blocks a whole fathom above the water. There were seventy houses upon this island, which, according to the information of the natives, served as a place of refuge from attacks ²⁾. MORESBY says of this island: "The islet was surrounded by a wall or breastwork of coral block pieces, thrown up for defence" ³⁾.

The problem of the artificial islands will be discussed later, but it will be remembered that the Ambat of Seniang erected an artificial island and we are of the opinion that the typical Polynesian version of the fishing up of an island is but the mythological expression of the erection of such islands; we shall find artificial islands in connection with the stone-using immigrants also in Malaita and other places of Melanesia.

Near the men's houses there are not infrequently artificial wells, i.e. a round hole about 5 ft. deep, the sides of which are lined with coral stones. There are also stone steps for descending ⁴⁾. GIRIEUD and HERRENSCHMIDT ⁵⁾, who record artificial wells of the Reef Islands, say that they are fenced in by walls.

Regarding Pileni Island (Reef Islands) the following may further be mentioned: At the harvest of a plentiful bread-fruit crop, a sort of silo is made by digging a large hole, and lining it with banana leaves; this is filled with bread-fruit, covered in with more banana leaves, and finally the pit walled round against the incursion of pigs. In time of need it is opened ⁶⁾.

A word must be said about the well known duka posts which are set up in the men's house or the ghost house for the spirit of an important man after his death. These posts are to be found on all the islands of the archipelago, except on the Reef Island Temami, the more southern island Tapua, and Vanikoro. These duka posts represent the spirit of the dead man, and the spirit himself is called "duka". Offerings for the ghost are

1) 793 33, 215. 2) GRAEBNER 299 98, DALRYMPLE 178 127. 3) 580 83; it is probable that also the information of TORRES quoted by BURNEY 115 288 applies to this island. 4) GRAEBNER 299 98, SPEISER 790 297, 796 177 f, DALRYMPLE 178 195. 5) 288 107. 6) COOMBE 170 204 f, SPEISER 796 184, O'FERRALL 623 Chapter "Matema".

laid before the posts ¹⁾. SPEISER has expressed the opinion that the duka posts seem to correspond to the wooden images of the New Hebrides. We have seen that these latter as well as the stone-work erected in connection with the Suqe were closely connected with the cult of the dead. On Temami, one of the Reef Islands, and on the islands Tapua and Vanikoro on which no duka posts were found, there are also ghost houses which are in some respect identical with the club houses. In some of them, stones which are here called by the Polynesian name "atua" are set up to represent the ghosts. In Vanikoro, the skulls of the dead also are in these houses ²⁾. These atua stones are also mentioned by RIVERS who says ³⁾ that they were "situated in places which are not visited by anyone. One of these places had been seen by my informant. The stone was about two feet high surrounded by a low fence of stones". And GOODENOUGH records ⁴⁾ that in a ghost house of Vanikoro there was "a quantity of skulls around some upright stones". Although this description is not very explicit it is nevertheless evident that the function of these stones agrees with that of the duka posts. It is therefore probable that these stones are real monoliths which, like those of the New Hebrides, were thought to be the embodiment of the spirits of the dead. Whether the low fence of stones surrounding the upright stones is really a stone circle such as those which are found in the New Hebrides it is difficult to decide definitely from this description.

The only kind of preparation of the skulls here consists in the putting of wooden wedges into the eye sockets, the nose and into the foramen magnum. The skull is painted with ochre. This applies to men, women and children as well ⁵⁾. This custom is found on the south coast of Nitendi and also in the Reef Islands. At this stage of our investigation, it is difficult to determine whether it has any connection with the real preservation of the skull in Malekula and Ambrym.

Sacred Plants. Almost nothing is recorded of the ritual use of sacred plants and this also, is one important point of difference if compared with the New Hebrides.

However, ornamental plants, which are cultivated near the houses, are mentioned in the earliest sources, but without detailed information ⁶⁾.

Mythological evidence. In the mythology we again find a great number of typical themes of the Qat-Ambat-Tagaro mythology mixed up with some typical Polynesian themes. This, I think, is the most convincing demonstration that the immigrants who brought the stone-work to the New Hebrides are also responsible for its introduction into the Santa Cruz

1) GRAEBNER 299 148, CODRINGTON 160 139, 264, SPEISER 796 207, COOMBE 170 190, 199, GILLET 287 153 f, O'FERRAL 622 229 f. 2) GRAEBNER 299 151, 170, 181 with many references. 3) 725 I 231. 4) 295 336. 5) SPEISER 790 299, 800 90, 796 204.

6) GRAEBNER 299 103 from FIGUEROA in DALRYMPLE 178 193, BÄSSLER 36 371.

Archipelago, although the types of this latter stone-work differ in some respects.

There was one named Mosigsig who lived in Utapua. One day he climbed a bread-fruit tree and threw down fruit. One fruit he had thrown down was rotten inside, and he looked at it and said: "This is my canoe", for it was hollow; and it became his canoe with sails and outrigger. But his mother told him not to go to sea, as there were large fish that would break his canoe and eat him. But he insisted and when he had sailed with his younger brother near to where Santa Cruz now is, some fish suddenly began to jump on the canoe, so that it began to sink. So he took a net and caught them. Another time when he came to the same place, a large clam tried to break the canoe; but he dived into its open shell, and killed the clam, and took it to his mother. Then he set out again, and a large pearl-shell oyster tried to destroy his canoe; but he dived into it and killed it, and carried it to his mother. And thereafter he killed other man-eating fishes. He invited them to come on board, put a large knife under them, and when they sat down they cut themselves upon it, and died. Then Mosigsig took these fishes home to his mother and they ate them. Once when he let down his line with a large hook it caught round two trees. He hauled on them, and up came the bottom of the sea and made Santa Cruz. Now the sun was setting when they went ashore, and Mosigsig's younger brother was afraid and ran away. He ran out into the sea, and back to the land; and when he came to the point he ran beyond it; that is why there is a lagoon on that side of the island, and a long point at that end of it. But Mosigsig was not frightened; he stood still. Therefore this side of Santa Cruz is all even. Mosigsig was very angry with his younger brother for spoiling the island he had created, and making such a long point. Then he went on board his canoe, and returned to Utupua, and lived there ever after¹⁾.

If we compare this myth with the other myths of the culture heroes it is clearly evident that the name of Mosigsig corresponds to the Polynesian Mautikitiki of Fate and Aneityum, Matiktiki of Tanna, and Moshikishiki of Futuna and Aniwa. It may be that the creation of the canoe out of a bread-fruit is not without significance. The bread-fruit tree as we have seen, was one of the trees which Ambat planted in Seniangu, its wood played a certain part in the Nimangki society, and it is the tree in which Matiktiki of Tanna shut up the white children to save them from the pursuing ogre. The wonderful creation of a canoe, although in a somewhat different manner, was also found with Qat of the Banks Islands. That these sea-faring immigrants made their own canoes is quite natural. This, it will be remembered, is also related of Tagaro of Maevo, Barkulkul of South Pentecost, Yetar of the Sakaos and the other analogous culture heroes also voyaged in their canoes. But the creation of the canoe out of a plant or

1) COOMBE 170 192-194.

fruit will also be found later in some other analogous cases. The killing of the giant clam agrees with the killing of the giant clam through Ambat in Seniang, and Kabat in Mewun, with the sole difference that Ambat and Kabat kill the clam by thrusting a stake between the shells. The characteristic theme of the fishing up of the island which we have found in connection with Ambat of Seniang, where the giant clam killed by him becomes his island, again appears here. Furthermore, we have found this theme in connection with Mauitikitiki of Fate, Moshikishiki of Futuna and Aniwa, Inhagaraig of Aneityum, and Tafiki and Metikitiki of Tikopia. That Mosigsig's younger brother was afraid of the first night whereas Mosigsig himself was not, is strongly reminiscent of Qat's creation of night, of which also his brothers are afraid whereas he is not; and in the same way night was created by Tagaro in Aoba and Pentecost and by a certain "chief" in Fate. As in the case of the antagonistic brothers of the numerous other culture heroes, here too, a quarrel between the two brothers is the cause of their separation and leads to their final departure, an incident encountered in connection with almost all the other culture heroes of the stone-using immigrants. We have already found that the physiographical shaping of the surface of the earth was ascribed to the culture heroes Tagaro in Aoba and Pentecost, Wuhngin in Tanna, Moshikishiki in Aniwa as well as in an analogous myth of Aneityum.

The following myth is known on Reef Island ¹⁾: A man called Tepkakhola and a pig called Ulaka ate men, until there was scarcely anyone left, ten brothers and one woman only remained. Then they built canoes to flee from the island, but their sister had a very big foot and when she lifted up her foot, the canoe sank. So she tried with each of her ten brothers, but the same happened with all their canoes. So the brothers dug a very big cave, and carried much food into it. Then they sailed away to Metema and dwelt there. But when the woman lived in the cave, one day two lizards came into the cave and jumped down her throat and she conceived, and bore twins. Later these two killed the ogre and the man-eating pig.

This story is just another Qat story. The ten brothers (with regard to their varying number see earlier) we have found in many islands of the New Hebrides. The story corresponds to that of the ogre Taso of Maevo or its analogous version of the man-eating snake of Maevo, and the same story has also been found on Tanna. The two children who, according to the story of Maevo, kill the ogre, were the children of Qat's sister; here in the Reef Islands they are the children of the sister of the ten (Qat) brothers. In Maevo, Qat has also nine brothers. Here the woman has a "big foot"; in the Maevo story the analogous sister of the Qat brothers is pregnant. Here it is the brothers who dig a big cave for their sister to hide in; in the Maevo version of the man-eating snake it is the woman herself

1) O'FERRALL 622 232 f, COOMBE 170 211-213.

who digs this pit. In all the stories of Maevo, Tanna and Reef Islands the children who slay the ogre are twins.

According to the Reef Islands story ¹⁾. Lata created this world and the things in it. He was very wise. Lata and Sinota had a dispute about a canoe. Sinota went into the bush to hew a canoe, but he could not find a good tree for it so he chopped Lata's canoe in pieces. When Lata saw it he sang a song and the canoe came together again. Then Sinota chopped it again, but as he was chopping a chip sprang up and fell into his bag, so that when Lata sang a song again the canoe tried to join together again but was unable because the chip was missing. Sinota ran to Lata and they began to quarrel about the canoe. Then Lata hewed out another canoe in the bush, but the people were not able to draw it down to the sea. Then Lata began to sing a song, and the canoe began to move of its own accord down to the sea. But Sinota did not do this and the people drew his canoe to the sea. Lata deceived Sinota about tying it together, telling him to use hibiscus fibres whilst he himself used coconut fibres.

This story agrees in the following details with the story of Qat. Qat as well as Lata are culture heroes who create all things. The theme of the rejoining of the chips during the making of the canoe also occurs in the story of Qat and Marawa, the only difference being that there it is Marawa who causes the pieces to come together until Qat hides with one chip, so that they cannot come together again. Similarly, too, Qat built his canoe inland causing his brothers to laugh. Qat causes the rain to fall forming a channel so that his canoe moves down to the sea in the same way as the canoe of our present story moves down to the sea of its own accord after the song of Lata. The version of the deceit regarding the lashings of the canoe in the Reef Island story gives an impression of being incomplete. This deceit is not recorded in the Banks Islands version where, however, the canoes of the brothers sink, and only Qat's canoe continues to float on the water. It is not improbable that this too was the end of the Reef Island version, but that the record is mutilated.

On the Reef Islands also the following story is known ²⁾: There was a certain woman who was pregnant and her husband had married one hundred wives. When the child was born and grew up he was very handsome; he lived entirely in the club house. "In the night he went to work, but in the daytime he went back again into the club house and dwelt there. And so it was every night." He worked in the garden of his father's wives, but he did not work in the father's garden. Once the father saw him and began to be jealous of him and hate him. The son began to inquire who he was, "but they did not tell him, but they said: It is your kinsman". So he sailed away fleeing from his father. He did not eat any food and his body weakened. Finally he was saved by a tree. Every night the stars came

1) O'FERRALL 622 227 f, COBRINGTON 160 167, 201, GRAEBNER 299 152 f. 2) O'FERRALL 622 230 f.

down to catch fish. One night he took the fish, and when the stars came back they kept seeking for the fish. This he did every night. One night the tree said to the stars: "My son is here" and they replied: "You are a fool, this is a man, and you have not told us", and they took him up into the sky and he dwelt there. When the wives of his kinsman were pregnant and were near the birth, he cut open their wombs and took out the babes. Once the stars asked him whether he wished to return to his country, and when he replied in the affirmative, they made a raft, put his property upon it and let him down to his home. When he saw his kinsman who had driven him away, he shot him dead.

For the following reasons I am of opinion that this story also belongs to the Qat-Ambat-Tagaro mythology: the stars which here come down to earth certainly correspond to the winged women of the sky who in the stories of Mota, Meralava, Maevo, Aoba, Pentecost, Fate and Tanna came down for bathing or fishing. That they are really women is suggested by their expression: "You are a fool, this is a man, and you have not told us". The hiding of the fish is but a modification of the usual theme of the hiding of the wing of one of the sky-women, which we have found in most of these myths. From the fact that it was Qat in the Maevo story and probably also in the Mota and Meralava stories, as well as Tagaro in the Aoba version who married the winged sky-woman to whom they also ascended into the sky (regarding the variations of this point see the myths mentioned) it is probable that the man of the Reef Island story is also identical with Qat or Tagaro. We know that Tagaro is actually known in the Reef Islands, since in the prayers to Thaumaka, the great spirit of the Reef Islands, "who lives above the sky", this spirit is addressed by the name "Tangaloa"¹⁾ and among the chiefs of Vanikoro the name Tangaloa is very common²⁾. We have seen the connection with the sky to be one of the most characteristic features of the many culture heroes such as Tagaro, Yetar, Hambut etc. This makes the connection of the man of the Reef Island story with the culture heroes of the other islands still more probable. The cutting of the babes out of the womb of their mothers we have encountered in connection with the sky-being Yetar of the Sakaos whose association with the Qat-Ambat mythology has been shown. And if we may be permitted to compare the cutting open of the eyes of their blind grandmother by Karisibum and Makosawaki (or by Makosawaki alone) in the Fate story, by Karihi and Tawhaki in the Maori story and the story of Tanna, with the cutting out of the babes in our present story, further strength would be added to the supposition that the hero of the Reef Island story belongs to the Qat-Ambat-Tagaro mythology. It would be in agreement with this assumption also that Karisibum and Makosawaki of Fate are the sons of a man by a winged sky-woman; and the analogous child in the

1) O'FERRAL 622 230, GRAEBNER 299 153. 2) GRAEBNER 299 181.

Tanna story is the son of Masineruk whom we have also seen to be a sky-woman. But the similarity goes still further: In the Reef Island story it is said of the hero that "In the night he went to work, but in the daytime he went back again into the club house and dwelt there". This is strongly reminiscent of Ambat of Seniang who "never looked out in the middle of the day", but looked out to the sea at night. It could even be asked whether the creation of night by Qat of the Banks Islands, Tagaro of Aoba and Pentecost, and probably by Mosigsig in Santa Cruz is not only another version of this connection with night. Finally it should be noted that in the Reef Island story the Oedipus-like killing of the father by his son who does not know his father, having worked in the garden of his father's wives but not in the father's garden, agrees with the Kabat version of Mewun. There too, the two sons of Kabat lived with their mother, but Kabat lived in the logho, so that they killed him not knowing that he was their father.

From this analysis it follows that the Santa Cruz mythology in spite of its Polynesian influence distinctly belongs to the Qat-Ambat-Tagaro mythology. The resemblance between the stone-work of Santa Cruz and that of the New Hebrides is therefore due to the fact that it was introduced into both regions by the same immigrants. The numerous differences found to-day in both regions cannot weaken this conclusion. A direct connection of these immigrants with the stone-work does not appear from the myths, but the people of Te-Motu Island (nor far from Nitendi) said to O'FERRALL¹): "Some of us are like men of quite a different country, and yet they are of our own family. The coconuts of our island belong to them, and we think that they came from away beyond Te-Motu." It might well be possible that by this is meant the stone-using immigrants to whom, in the New Hebrides, we have attributed the introduction of the coconut, but of this we cannot be sure.

THE SOLOMON ISLANDS

San Christoval: Fox's excellent work *The Threshold of the Pacific* has furnished us with such a wealth of information on the island of San Christoval that there is little left for us to do except compile, analyse and arrange the various data.

Physically, the people of San Christoval are Melanesians, but at many places on the island light skin and straight or wavy hair have been observed, and COOMBE²) even records: "almond eyes amongst them often accompanied by a slight droop of the eyelids. Seeing them it would be hard to dispute the existence of a Mongolian strain"³). The language of the whole island is Melanesian even in Bauro, where, however, the grammar and vocabulary show traces of apparently non-Austronesian languages also.

1) 662 226. 2) 170 232 3) See also GUPPY 314 119, 315 278, Fox 263 3, PARAVICINI 626 138.

The language is closely connected with that of Malaita, Ulawa, Ugi, and South-east Guadalcanar, so that "over all this area there may be said to be only one language" ¹⁾. Trading relations exist with Saa, Ulawa, Malaita and Guadalcanar ²⁾.

Taking as a basis the distribution of the different clans, and following the scheme of RIVERS, FOX, describing the history and peopling of this island, says that apart from the mythological pygmoid Kakamora, the aboriginals were the Amwea, a physically Papuan-like people with a non-Austronesian language. Then came the first immigrants, the Atawa, speaking an archaic Austronesian tongue and corresponding to RIVERS' "Proto-Polynesians". By fusion with the Amwea they formed the "dual-people" of the island, who constitute to-day the basis of the different social systems of the whole island. In Bauro these dual-people are still preserved with their moieties Atawa and Amwea. Then followed the Austronesian immigrants Abarihu, who arrived in several waves, the later waves being the ruling group: Araha, Mwara and Amaeo. These are the stone-using immigrants, the "archaic civilization", the "Kava-people" of RIVERS, identical with those immigrants who introduced the graded societies into the New Hebrides, i.e. those immigrants whom we have come to know as the Qat-Ambat people. Finally there followed the most recent immigration of the Bird-totem people, who in particular introduced cremation ³⁾.

The following objections can be raised to this scheme: first, Atawa and Amwea the two "moieties" of Bauro are two clans in the rest of the island, and also in Santa Anna, Ugi and Ulawa. Secondly: the people of San Christoval themselves claim that Atawa and Araha are the same people ⁴⁾. Even on the north and south coasts of Bauro where the clan system is still found, Amwea and Atawa are clans, and only in the interior of Bauro do Atawa and Amwea occur alone ⁵⁾ and are considered by FOX to be moieties.

Even if Atawa and Amwea were two "moieties"—a problem which we shall not discuss further at present—the objection of ELLIOT SMITH should be quoted here, as he says in his preface to FOX' book ⁶⁾: "Evidence from wider areas than Melanesia, however, shows that the form of society known as the dual organization was carried about the world, and to Melanesia itself among other places, by highly civilized peoples, whose ruling classes were culturally similar to the Araha of San Christoval. In fact this wider survey suggests that the ancestors of the Amwea, Atawa, and Araha, must have come to San Christoval at the same time and not, as Dr. FOX argues, in successive ways ... The claim is put forward by the people of San Christoval themselves ... that Atawa and Araha are the same people." In opposing the identity of the Araha with the Atawa, FOX

1) FOX 263 3, 5, 38 f, 44. 2) FOX 263 13, 36, 182, 232, 254, 303, 311, 342, FOX and DREW 264 133, PARAVICINI 626 131. 3) FOX 263 354 ff. 4) FOX 263 34. 5) FOX 263 6, 15, 33 ff. 6) 263 VIII.

himself elicits the fact that "the dual people, Atawa and Amwea, interred their dead, sitting and bound, round sacred trees, and the Araha preserved their dead by embalming, extended burial on a heo, and so on" ¹⁾. Fox argues in this way because he follows closely the scheme of RIVERS, according to which interment in the sitting position is characteristic of his "Dual-people", whereas burial in the extended position is attributed by him to the "Kava-people" ²⁾. But we have already seen that interment in the sitting position must be attributed to the Qat-Ambat immigrants, and the fact that Atawa and Amwea bury in the sitting position is but additional support for their association with the stone-using people ³⁾.

The stone-work of San Christoval is exceedingly rich. The village of the Arosi is often characterized by the possession of an ariari, a kind of stone wall built along the sea front of the villages. An ordinary stone wall to keep out pigs from a garden or to mark a boundary is called dua, and is roughly made, but the ariari is quite different and is really a stone platform very carefully built of large even stones, its sides even and its top broad and flat. It may be as much as 12 to 15 feet broad and 4 or 5 feet high, and extends partly round the village. It has several entrances. Those along the sea front were taboo to women, except one which was the common entrance for everybody. Planted on the broad flat top of the ariari were the aihuri, a tree with yellow leaves and the niu mahu, the pale yellow coconut, and sometimes houses were built on it. The niu mahu is a more or less sacred tree, and in Arosi it is also planted at the pirupiru, the sacred place by the shore where sharks are worshipped; and here too a large circular ariari is built round it. Most natives say the ariari is only protection from the surf, but this, according to Fox, seems unlikely, for it is too elaborate, with its careful building and numerous entrances; moreover, there is the circular ariari at the pirupiru, and also an ariari at the hera (burial ground) some of the latter being found inland, and on these stone platforms sacrifices were offered to the dead. Sometimes the ariari platforms are built in front of the sacred men's house (tawao) in which case sacrifices are often offered on them. At the present time at least, ariari are only found at the west end of the north coast, so they may be a more or less recent importation from Malaita, thinks Fox, "for one hears of stone buildings there and Mr. T. Williams told me", says Fox, "he had found large stone walls in the interior and also stone buildings" ⁴⁾.

If these stone platforms are compared with the stone-work we have mentioned so far, their resemblance with the stone platforms upon which houses are built in Santa Cruz is obvious. Both are situated in such a manner that they give the impression of affording protection from the surf. We have pointed out before that the Santa Cruz stone walls correspond to the Gaua stone-work more than to any other, although nothing is said

1) Fox 263 361. 2) RIVERS 725 II 277, 286. 3) See also Fox 263 66 f. 4) Fox 263 4, 8 f, 115, 281, fig. p. 9.

in the sources of information of a ritual or any other function of the Santa Cruz walls. This might, however, be due to a lacuna in the information available. The fact that sacrifices are offered on the ariari platforms in front of the men's house in Arosi, and the fact that sacrifices to the dead were offered also in the other ariari, serve to emphasize the resemblance with the Gaua stone-work. There too, the walls were erected in front of the men's house, and men of the Suqe danced upon them. Sacrifices were offered there also, but on the wona platforms near by. The fact that on the ariari sacrifices are offered to the dead, agrees with

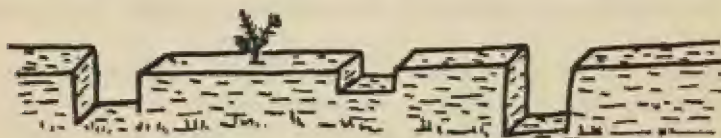


Fig. 8. Ariari stone wall in Arosi (After Fox 263 9).

the cult of the dead which we have seen to be one of the outstanding features of the Suqe. Still further similarities with Santa Cruz will be evident from the following.

Rough stone walls called *dua* are built for various purposes. Boundaries between villages were usually marked by *dua* walls. *Dua* are also stone fish dykes and no woman was permitted to cross these. Other *dua* are stone walls running out into the sea some little way. These are sacred sometimes to the sacred sharks, and shell money is offered on them. At Onehature on the south coast, there is a famous *dua* running out into the sea, connected with the *figona* (spirit) *Wamarea*, who is said to be the fellow of *Hatuibwari*, the winged serpent. On this dogs were sacrificed, and it is very sacred. The walls of the *tawao* (sacred men's house) are of stone and are also called *dua*, but the three stone walls of a canoe house (*oha*; the wall in front is of wood) are called *bani ariari*. The row of large upright stones forming the base of the thatch walls of the inner chamber of the *tawao* are not called *dua*, but *bo rahahe*, and the upright stones enclosing the place round the central post of a canoe house, a place for sacrifices, are called *uhi mato* and not *dua*. In Arosi, gardens are also enclosed with stone fences, which are called *dua*; the stones placed on edge round a little enclosure for throwing betel skins, are also called *dua*. A few houses at the west end of the island are said to have stone walls like canoe houses, but Fox did not see them, and he thinks they are certainly very rare ¹⁾.

The *maraufu* initiation-ceremony into bonito fishing, which is made for the *Araha* boys, has clearly been shown by Fox to belong to the culture of the *Araha*. The place on the coast at which the ceremony was held, and on which a canoe house was built, was enclosed by a stone wall and the

1) Fox 263 281 f, 294.

Araha boys built a little stone house about 5 feet by 5 feet in which they lived¹). In the stone enclosure was a small stone platform where the mothers put the food which they brought for the boys²).

Stone platforms where canoes land from bonito fishing are called abu i waiau (waiau = bonito³).

The dua which ran out into the sea are certainly identical with the stone walls which in Santa Cruz ran out into the sea. The stone platforms for the landing of canoes are apparently identical with the "bastions" of Santa Cruz. Here and there stone walls surround the villages, in both places we find stone walls surrounding the gardens, and fish dykes occur both in Santa Cruz and Arosi. The problem of fish dykes will, however, be discussed later.

"The pirupiru is the name given apparently to two different places. The spot outside the village where one or several sacred trees grow is called pirupiru. These trees are banked round with flat stones or enclosed within a stone fence. The usual tree is a small coconut with yellowish leaves called niu mahu (the forbidden food of the Atawa clan in some places, though not in others); other trees common are the pirupiru itself, the sagirima and the taro. Besides these trees, it is usual to find dracaenas and crotons planted about them. Within the enclosure skulls are buried. On the stones sacrifices are offered both to figona and adaro (ghosts).... At Raumae in the interior (Bauro) a similar spot is called not pirupiru but aritengari, i.e. arite, a tree (*Catappa terminalis*) and the ngari or almond. This fact, and the name pirupiru, apparently from the tree pirupiru, seem to point to "sacred tree or grove" as the original meaning of pirupiru.... There is, however, a different place called pirupiru, the rock on the reef... where sharks are worshipped", and here too the niu mahu is planted surrounded by a circular ariari⁴).

These facts call for the following remarks: the existence of the pirupiru in Bauro is additional support for the assumption that the Atawa belong to the stone-using immigrants. Still more important is the fact that the niu mahu coconut—the sacred tree which was planted on the village ariari and also within the pirupiru, which shows its close association with stone-work—is the forbidden food of the Atawa, and Fox says that it is "associated with Atawa" and "almost a totem" for them⁵). In the New Hebrides we were justified in attributing the coconut to the Qat-Ambat stone-using immigrants. If in San Christoval the coconut is correspondingly associated with stone-work on the one hand, and with the Atawa on the other, we have further support for the opinion that the Atawa belong to the stone-using Araha immigrants.

The sacred trees which are surrounded with a stone fence here, agree to an astonishing degree with the sacred trees which, in certain grades

1) For a stone house erected in a game see Fox 263 195. 2) Fox 263 185-190, 362, fig. p. 186. 3) Fox 263 281, 119. 4) Fox 263 115. 5) 263 8, 280, 365.

of the Nimangki and Nalawan of Seniāng, were surrounded by a stone circle. There, too, croton and dracaena were planted round the ritual object within the stone circle, and we have already given many examples of the importance of these and other sacred plants and their association with megalithic stone-work. In Seniāng and the Maskelyne Islands, wooden images or monoliths were surrounded by these stone circles and it has already been pointed out that they were considered to be the resting places or the embodiment of the spirits of the dead. The whole of the Nimangki and Nalawan societies could therefore be considered as a cult of the dead governed by definite rules. It is entirely in agreement with this that on San Christoval, where the skulls are buried in the enclosure (which is

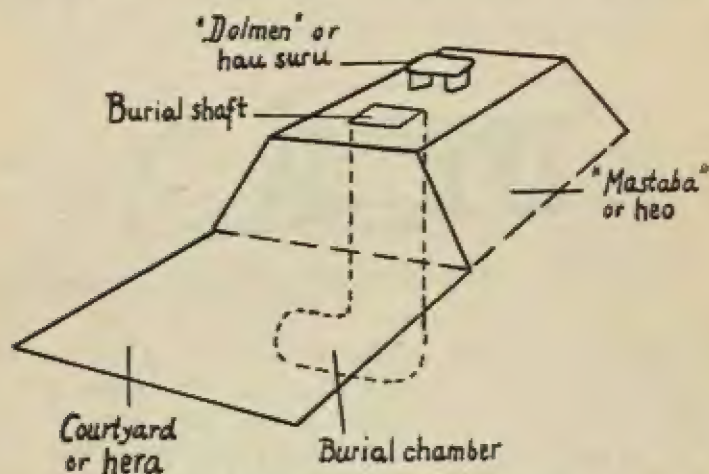


Fig. 9. Burial mound "Heo", San Christoval. (After Fox 263 219).

not done in Malekula), sacrifices are offered to the ghosts. Unfortunately we have not a sufficiently detailed description of the atua stones of Santa Cruz which were surrounded by a low fence of stones, but it is highly probable that we are there confronted with something similar. If this is so, it would constitute another important point of contact with the New Hebrides.

Fox's record regarding the disposal of the dead is of particular importance. Burial mounds are very common all over the island including Bauro, thus giving additional support to the view that also this inland region was invaded by the stone-using immigrants. These mounds are called heo, sometimes hera ¹⁾. Properly a hera is a square, or the dancing ground in front of the burial mounds, but the oblong flat top of the mound is itself a hera, and the word is extended to include the whole; heo

1) A description of the "mastawa" of Bauro is not given here since, according to Fox himself, this "is evidently a modification of the Arosi heo". 263 223 f.

being seldom used. On the west side of the heo was usually a canoe house and on the north side a dancing ground. On the top of the heo was a pit or shaft leading down into a cave. Also on the top of the heo was a dolmen called hau suru ("exalted stone"), consisting of three or five large slabs the largest forming the top. In the dolmen the skulls of the dead were placed.

Fox ¹⁾ shows such a dolmen with a "holed stone (moved to right)", as the title says. These holes are absolutely identical with the "Seelenloch" of the European dolmens. Although, as far as I can see, the purpose of these holes is not indicated by Fox, it seems highly probable that they served as a means of communication for the soul with the outside world ²⁾. On the dolmen sacrifices were burnt, and on this were sometimes round stones. (These are strongly reminiscent of the "stone child" which, we have seen,




Fig. 10. Dolmen in Arosi, San Christoval (After Fox 263 218).

occurs in the Torres Islands, Maevo, Malekula and Epi. Here they are used in magic.) Sometimes there are on or near the dolmen stone carved heads, stone statues, stone carved bird statues, stone fishes and reptiles. All of these are accompanied by the belief that the ghost of those buried in the heo dwell in them, and this applies to the Araha ghosts in particular. The stone statues are of various size. Some are small only about a foot high, in a crouching attitude and with what looks like a kind of a hat. They are of the same shape as the figures carved on spears and house posts. Others are life-size or almost life-size representing men and women, in a sitting position with arms stiff and straight on each side. The shaft of the heo was called giru bwara and there might be several shafts on a heo. On the heo there was at least one sacred tree, for instance a canarium nut tree, and some sacred shrubs, especially panax or evodia, dracaena (diri), croton which characteristically bears the name sasaro or tataro and catappa (arite); "in fact a grove of dracaena marks a hera". These sacred plants on the heo are ghost housing objects, in the same way as the stones mentioned before. Near the base of the heo, and sometimes on the heo itself, a sacred coconut is planted ³⁾. On the heo, there were also sometimes stone pillars 2 feet, 3 feet and even over 10 feet high, the latter 6 inches in diameter, and

1) 263 fig. p. 218. 2) See also the holed slab pictured by Fox 263 fig. c p. 288.

3) A dwarf coconut which "frequently marks the grave of the chief in the island of Ugi" is mentioned by GURFF 314 52.

evidently worked; one was  shape. These menhirs were set up where men or women were buried. There were other mysterious stones whose use is not known, as for instance the "Shining stone", the "Whistling stone" (three feet high), the "Turtle stone", etc. The coast heo are made of rubble of earth and stones bordered by large slabs of rock, and the bush heo are usually of red clay. In some cases they are partially built up round a core of natural rock. The size varies considerably, from small heo 6 feet by 4 feet and 1 foot high, to heo 60 feet by 40 feet and 20 feet high, but the large ones are rare and the small ones common. The heo, and burial on the heo, are specially connected with the chiefs (Araha) and, in Arosi, with the Mwara and Amaeo clans also; other clans may each have its special heo. But the Araha are almost always buried on a heo. Several methods of burial took place on the heo, but the placing of the dead on a bed in the burial chamber, the body having first been washed continually with water and lowered through the shaft, was the characteristic form. Another method was cremation. Both men and women were buried on the heo¹). When all the flesh was gone the skull was taken to the dolmen, and the other bones were probably left in the burial chamber. In one heo the shaft was edged with stones. The shafts of chiefs were left open, while other graves were filled up with earth. The heo was believed to be generally guarded by a serpent spirit hi'ona²).

Fox gives a detailed description of the stone Wabina or Waibina, one of the "sacred stones" (hau maea) which are to be found on the heo³). This stone is named after the hawk Bina. It is about 2 feet square and stood on a heo. Its priest was an Araha. The Wabina stone itself is not carved, but was surrounded by carved stone figures of sharks, bonitos, and birds⁴). The birds were the frigate hawk, the sacred bird of the Araha clan, the Bina and the seagull. Close by was a sacred coconut called niu oraora; oraora means possessed by a ghost. This tree was possessed by Wabina, and was consequently magical. Before war the priest took a branch of dracaena and struck Wabina, and then gave some of the leaves to the fighting men, who tied the leaves round their necks. These bunches were called "dracaena shields" and had great protecting power. Then the priest took a dracaena leaf and they all went to the sacred casuarina. Here he tore the leaves into shreds, as many as there were fighting men, and distributed them. When the expedition returned, the leaves were brought to Wabina and burnt.

1) "The corpse was carried to water and the flesh struck off, or it was washed on the top of the heo". Fox 263 221 f; Fox has interpreted this practice as mummification, see text accompanying fig. p. 219. But it is beyond all doubt that this has nothing to do with mummification. On the contrary, the continual washing of the corpse hastens decomposition. 2) Fox 263 217-224, 230, 278, 285, 291 f, 362, fig. p. 218, 219, 220, 221, 223. 3) 263 282-92. 4) Many of such carved stone figures of birds, sharks and bonitos were also in the canoe house. Fox 293 291.

Piles of stones (*wadu i hau*) are found in some places. One pile which was found on a *heo* was for sacrifices, as were probably all of them, but their use is not known now. A pile of stones at Bonimainiu is about 10 feet square and 3 feet high, and is connected with cannibalism. A man taken in war was brought to this pile and killed here, and his blood poured out on the stones, after which the body was cooked ¹⁾. The village where the mythical beings *Masi* had formerly lived, is marked to-day by piles of stones. There are also piles of stones at the foot of the main post of some of the men's houses on which sacrifices are offered ²⁾.

In some villages there are two large blocks of stone called *hau ni bwero*, of about 4 feet high and 4 feet broad, and were used as seats for chiefs. Moreover some other resting stones are mentioned by Fox ³⁾, but it is not clear whether by these worked or natural rocks are meant.

At the entrance to every canoe house there is a large flat stepping stone called *hau buubuu* ⁴⁾.

Kakaru are wells lined with stones similar to those of Santa Cruz. The deepest of them is about 15 feet deep; usually they are about 10 feet deep. The bottom is lined with stones, and the sides are lined with stones some 4 feet or 5 feet from the bottom, probably to the level the water rose to ⁵⁾. Similar wells occur on the now uninhabited Three Sisters Islands. At Oro Marau Island two wells have been sunk and edged with stones. One has a good stone wall, and on flat slabs of stone are good figures of frigate hawks, bonito, footprints, canoes, *usu* (*Araha* cut tatoo) and designs such as one sees on canoes ⁶⁾. The character of these figures and the fact that the first place to which the dead *Araha* go on their voyage to Marau Sound are the Three Sisters Islands, entitle us to conclude that these stone wells, like the other types of stone-work of San Christoval, are the work of the *Araha*.

When an oath is taken, an ordinary volcanic rock oblong in shape is usually set up ⁷⁾.

In many villages defence work has been found. It consists of ditches sometimes on each side of the village, but more often right across the middle of the village. The largest ditches were between 30 and 40 feet deep, 100 yards long and too broad to leap over. The ditches were spanned by tree trunks ⁸⁾.

Prehistoric objects. In San Christoval a great number of stone bowls, called *oba*, are still in use by the natives. Some are little bowls used for crushing betel nut for sacrifices, but others must be large, for on the south coast there is said to be a stone *oba* at Hauraha which stood on the *heo* and in which burnt sacrifices of dogs were offered. In the *airasi*

1) Fox 263 287 f. 2) Fox 263 115, 149. 3) 263 289. 4) Fox 263 289.
5) Fox 263 282. Another point of contact between San Christoval and Santa Cruz is the occurrence of round houses in both these regions. See Fox 263 332.
6) Fox 263 293 f. 7) Fox 263 312 f. 8) Fox 263 224, 310 f.

ceremony which, it will be seen later, is connected with the stone-using Araha, the fat of a pig is burnt in a very large stone cup of dark volcanic rock, which stands on the ariari. "It takes three men to lift one of these huge sacrifice cups, which are still to be seen". Fox further mentions a coral stone cup of natural formation on a heo used for sorcery, and a natural coral cup about a foot high in which offerings were burnt standing in a canoe house¹). The fact that the big stone cups as well as the oba bowls stand on the heo or the ariari, and that offerings were burnt in them on the heo and during the airasi ceremony, may entitle us to classify both these objects under one heading and to attribute them to the stone-using immigrants. Regarding Ugi Island, Fox records²) that "lying on the ground was a piece of stone which looked like a mortar, being about two feet long and the diameter of the hollowed out part about one foot".

In the coastal village Pamua, about 8 hours west of Kira-Kira, PARAVICINI has excavated prehistoric potsherds. To-day pottery is unknown on San Christoval. In the collection made by FOX, PARAVICINI found potsherds of the neighbouring and, culturally, closely connected Ugi Island where pottery is unknown to-day also³). Unfortunately nothing is recorded about the technique, decoration, size, etc.

Sacred Plants. We have already mentioned croton, dracaena, evodia, casuarina and coconut, and we have learned of their close connection with stone-work and the Araha. We may add that during the maraufu (bonito initiation), ceremonies whose close association with the stone-using Araha we have mentioned, the novices plant a casuarina to commemorate the maraufu, and since each party does so, there were many casuarina trees in all stages of growth. After the death of a chief (i.e. of an Araha) a man is killed and eaten. He is usually brought from a distance where he is bought. The buying sometimes takes place under a casuarina. A circlet of the needles of the casuarina is put on the corpse⁴). Fox further makes the following interesting remarks regarding the Arosi words Haiaru, Hai'uasi and Maea⁵): "The first two terms are used for charm and spell respectively.... To aru (transitive form, aru'i) is to impart mena. A maea is anything which has been aru'ia... and may be used for charm or spell.... In Mota a tano aruaru is a sacred place, which Codrington and Palmer connect with aru, the casuarina tree.... It is curious that the tree is certainly sacred and plays a part in initiation and death rites, and that its name in Arosi is saru or tarumare, while in Ulawa (and Saa)⁶) salu is the name of the tree, and saru'i is to charm"⁷). The great importance of this tree of Qat has already frequently been emphasized.

1) FOX 263 287, 294, 319. 2) 263 a. 223. 3) PARAVICINI 626 123. 4) FOX 263 186, 213 f. 5) 263 247 f. 6) The Saa word is recorded by IVENS 403 278. 7) With regard to Saa and Ulawa, IVENS has, however, objected saying that "there does not seem to be any reason to think that there is an interchange here of l and r". IVENS 403 278.

Kagauraha is a female serpent worshipped at Haununu (Bauro). If they wish to know whether to go to war or not, the priest takes strips of dracaena leaves and pulls them apart in the presence of the serpent. If the strands break they refrain from war. A similar divination with dracaena leaves is customary in Marogu. To make a vine cling to its stake, a spell is said and one breathes on dracaena leaves and then tears them to pieces. To sweep away the bad soil prior to the planting of a garden, a spell is pronounced and after this a dracaena leaf is taken, and the action of sweeping the garden with this is performed from end to end, after which the leaf is thrown away in the bush. Before offering sacrifices to Hatuibwari the house, beds and everything in the house are swept with dracaena leaves, and the figona asked to take away all the evil influences. A stick is thrust through a dracaena leaf to represent a house and the figona is asked to bless all craftsmen who build houses¹). The stories of the giant Rapuanate (Ugi) tell how he tied a bit of dracaena round his toe to make his enemies sleep, and this is a common practice to-day²). This is of importance, since the association of Rapuanate with the stone-using immigrants will become evident later on.—Pudding taken to the stone altar in the canoe house as a sacrifice was wrapped in a dracaena leaf³).

A war song recorded contains the following text "The croton, croton for hanging up the skull... the dracaena, dracaena for hanging up the viscera... the Hahe (evodia) for hanging up the jawbone". Sautabaio'o, a legendary hero was an adept at bonito fishing, and caught them with dracaena leaves. According to another myth, the little island Teomimanu was submerged by the people of the Three Sisters Islands who secretly planted some dracaena leaves on the island and threw some others into the sea. In magic against coughing and fever, and also in rain magic, dracaena leaves are used. Against an ulcer, a dracaena leaf is taken and held out towards the patient, so that the spell which caused the disease leaps on to the leaf; against malaria, the cause of which is thought to be possession by an adaro, they take a dracaena leaf, shake it over the patient, carefully carry it outside with the adaro hanging to it, and throw it away; in case of wasting disease caused by a bit of spear, etc. in the body, they take a dracaena leaf and draw the foreign body down and out at the end of the fingers or toes. Amaranthus, dracaena, and certain other plants are believed to contain mena. After the end of the maraufu ceremony, the boys have dracaena leaves tied round their wrists to protect them from any possible anger of adaro, when women see them. After death the "fishing for the ghost" is performed with a fishing rod with a sprig of dracaena as "bait". When the ghost is caught the rod trembles and the ghost is thrown into the sea⁴). It has already been mentioned that the *Catappa terminalis* (arite) is planted on many hera and the fruit appears as a lozenge tattoo mark on the forehead of

1) Fox 263 79 f, 89, 103, 106, 179. 2) Fox 263 165, 307. 3) Fox 263 314.
4) Fox 263 101, 170 f, 189, 212, 230, 246, 248, 253, 267, 309, 336.

chiefs in Ulawa. It is tattooed in Bauro, but Fox who records this does not know whether this is customary only with chiefs ¹⁾. In some gardens lilies (hi'imanu) were planted in the corners to make the garden fruitful. Besides these red-leaved shrubs were planted coleus, abu'abu (bloody), dracaena and amaranthus. "These were all said to represent blood. Without blood the garden could not be fruitful, and charms describe the taro having blood poured on it so as to be plentiful, though this is not now done." The bright red amaranthus (nwata) and the crimson coleus were especially planted. References to the amaranthus are found in the garden charms ²⁾.

The sacred character of the coconut, its association with stone-work, and with the Atawa whom we are inclined to associate with the Araha, have already been mentioned. "Many coconuts are sacred trees, full of adaro" ³⁾.

In a Bauro story it is related that a man whose name was Taraematawa, "a dead stranger", was drowned and his body washed up on a sandy shore. Two beautiful girls found his body. They went back to their village and the priest gave them two dracaena leaves, on which he breathed, saying a charm. "One of these" he said, "will restore to life and one will kill". The two girls returned with the dracaena leaves to the corpse and first tried the leaf which killed, but this had no effect on the dead man. They then touched him with the other leaf and he stood up on his feet, a living man ⁴⁾.

Fox has discussed the question as to which group of the people the ritual use of the dracaena should be attributed. According to his opinion the fact that "the dracaena and amaranthus always drive off and overcome with their magic the mena of adaro, even adaro spirits as well as ghosts, i.e. powerful beings connected with the Araha", indicates that "the dual-people have used their sacred plants against the invading Abarihu". But the planting of dracaena and croton on the heo and near the other stone-work, the connection with the Wabina stone, the use of dracaena for bonito fishing by Sautabaio'o, for the "fishing" for the ghost, the story of the bringing of a dead man to life again, etc. also in Fox's opinion show the close connection of these plants with the Araha. And he draws the following conclusion: "But there seems nothing in all this inconsistent with the view that it was a sacred Atawa plant, used as magic by the later Araha. Or it may belong to both peoples" ⁵⁾. This lack of precision in the opinion expressed by Fox can be overcome if our view, for which there is ample justification, be accepted that Atawa and Araha belong to the same group of immigrants. That all the sacred plants are closely connected with the stone-work and the Araha or, more generally speaking, with the Abarihu, agrees completely with the results we have obtained in the New Hebrides, and according to which the ritual use of all these plants must be attributed

1) 263 280. 2) Fox 263 103, 278. 3) Fox 263 280. 4) Fox 263 119 f.
5) 263 366.

to the megalithic culture. This will become still more evident in the course of this study.

A word must be added with regard to the cult of sharks. Fox has attributed it to the culture of the Abarihu¹). The following facts support this view: Near the Bina stone on the heo, (the priest of the Bina stone was an Araha) there were stone figures of sharks, and these were also found in the sacred canoe house with stone walls. On some sacred dua stone walls which ran out into the sea, sacrifices were offered to the sharks, and the pirupiru was the place designated for the cult of the sharks. Finally, the skulls of chiefs are deposited in wooden shark figures.—Sharks are often considered to be the incarnation of the ghosts. Certain of these ghost sharks are very widely known for instance in Ulawa, Malaïta, etc. The Pagewa or shark clan, occurs not only on San Christoval, but also on Owa Raha and Owa Riki, where the shark cult exists too²).

The information given has revealed so many connections between bonito fishing, the Araha, and stone-work, that it is probable that not only does the maraufu ceremony form part of the Araha culture³), but that the practice of bonito fishing as a whole must be attributed to the Araha.

Mythological evidence. In the following we must investigate to what extent the Abarihu with their different waves, the Araha (the chief's clan), Mwara, and Amaeo, whom Fox qualified as the stone-using immigrants of San Christoval, correspond to the Qat-Ambat immigrants of the New Hebrides.

The first people who came to San Christoval—so runs one Arosi story—came in the time of a great flood of waters, that covered the whole of San Christoval. They came in a large canoe from Mwara (Malaïta), but originally from a country far to the north-west whose name is not known. From this mysterious land the great canoe came to Mwara and thence to Arosi; a very large canoe, full of men, women, pigs, dogs, and birds and they paddled inland. From there they spread over Arosi and formed the Mwara clan. A great many people must have been drowned in this flood, for at Mwata, a village at the west end, the "men of Mwara" are pointed out, a number of rock pillars under the cliff, very regular, about three feet high, standing rank on rank. But some of these people were saved. Their leader was Umaroa. They landed at Robwana, near Waimara, and descended to the stream Wai abu (Sacred Water). Umaroa had brought a sacred stone, which they took about with them in their wanderings, and wherever the stone rested there is now a pirupiru; the stone was finally placed upon Umaroa when he died, and he was buried underneath it. Wherever one of the original survivors died there is now a heo⁴).

This myth is actually borne out by the present conditions which we have

1) 263 357. 2) Fox 263 33, 65, 74, 108, 117, 231, 351 f, COBBINGTON 160 179, 259, 162 302, PARAVICINI 626 136 f, BERNATZIK 71 34, 105, 243. 3) For this see: Fox 263 362. 4) Fox 263 9 f, 263 f, 285.

described. The heo is the burial place of the Araha in particular, and further of the Mwara and Amaeo, besides partly also of the other clans, so that Fox has attributed the heo to the Abarihu and more particularly to the Araha ¹⁾. In the myth the immigrants bring a sacred stone which is set up on the grave of Umaroa, and the dead Mwara changed into stone pillars. This corresponds to the fact that to-day stone statues, monoliths and also dolmens, stand on the heo. The conception that the stone statues are the abode of the ghosts has been found to be current in the New Hebrides also, where the stones erected in the graded societies were the embodiment of the ghosts. If the chiefly clan Araha is, on San Christoval, particularly closely connected with the megalithic stone-work, this agrees with the New Hebrides where stone-work was erected especially in the highest ranks of the Suqe which in reality took the place of the institution of chieftainship. The cult of the dead, which must accordingly be qualified as a characteristic feature of the Qat-Ambat culture, must here also be attributed to the Abarihu culture and particularly to that of the Araha, as Fox has actually done ²⁾. The myth itself clearly attributes the pirupiru to the stone-using immigrants, and the shark cult, which occurs in many of the other Solomon Islands also, has accordingly been attributed by Fox to the Abarihu ³⁾. The myth relates that it was the Mwara people who, among other things, also brought pigs, and Fox says clearly: "Pigs are said to have been introduced by the Mwara clan" ⁴⁾. The fact that also in the New Hebrides the stone-using immigrants may be regarded as the introducers of the pig, gives further support to the opinion that the Abarihu immigrants with their waves Araha, Mwara and Amaeo, are identical with the Qat-Ambat immigrants. Fox mentions a story according to which "the proper arms of an Araha are the bow and arrow and the spear, but not the club", weapons which were found by the Spaniards, but which have now become obsolete ⁵⁾. Although we do not intend to discuss the problem of the present distribution of bow and arrow, including their different forms, it must be pointed out that Qat of the Banks Islands, Tagaro's son of Pentecost, Ambat of Seniang, and the sons of Kabat of Mewun were also said to use bow and arrow.

Unfortunately nothing is recorded about the racial characteristics of the Abarihu, but, according to the traditions, the Atawa were fair-skinned and tall ⁶⁾. If, as we believe, the Atawa and Araha belong to the same group of immigrants, it follows that in all probability the Abarihu also were fair-skinned.

The myths do not contain any other direct indication of the connection of the Abarihu with stone-work, but such connection is confirmed by the following facts: stone seats are used by chiefs; now, the Araha are the chiefs' clan, and all the chiefs must belong to the Araha ⁷⁾. Thus the stone

1) 263 298, 357, 362. 2) 263 356. 3) 263 357. 4) 263 294. 5) 263 162, 285, 309 f. 6) Fox 263 356, 367. 7) Fox 263 14.

seats belong to the culture of the Araha¹⁾. The Wabina stone, surrounded by stone figures of sharks, bonito and birds, by the very fact that it stands on the heo and that its priest is an Araha, shows its close association with the Araha. Therefore Fox is certainly right in attributing stone carving to the culture of the Araha²⁾.

The opinion as to the identity of the megalithic people of San Christoval and those of Santa Cruz and the New Hebrides, to mention only those regions which have been treated so far, is most strongly supported by the fact that the Qat-Ambat mythology is again found on San Christoval³⁾.

Fox himself has emphasized that there cannot be any doubt that Warohunuga (his full name is Warohunugamwanehaora) is Qat in San Christoval dress⁴⁾. He was the youngest of a band of brothers the eldest of whom was Warohunugaraiia. He grew up as soon as he was born (like Qat) performed wonderful feats, which caused his elder brothers to envy and hate him, and try to compass his death. The details even are the same as in the Qat and some of the other analogous stories. One of the brothers, having persuaded Warohunuga to climb a betel nut tree, causes the tree to lengthen by a charm, so that he could not descend from it. But Warohunuga makes the tree bend down a long way off and descends safely. (So Qat's brothers charmed a nutmeg tree to make it swell; and in another Qat tale, the tree on which Qat has climbed lengthens and bends, and he comes down on another island. In a South Pentecost story, it will be remembered, a spirit causes a tree to grow higher and higher, so that a man who is upon it cannot descend, and a similar theme occurred in the story of the rescue of Matiktiki and the white children of Tanna, where the tree is a casuarina, and in Futuna, where it is an almond tree.) The brothers began to build a new canoe house, put up the centre posts and were now trying to get the ridge pole into position, but no one yet knew how to hollow out the tops of the main posts, so that the ridge pole fell down again. Warohunuga then cut the tops of the posts with an adze just as they are cut nowadays, and the ridge pole lay firmly. But they hated their brother and decided to kill and eat him. So the eldest brother ordered the others to dig very deep holes for the posts on the other side of the house; this they did, and when the first of the holes was very deep, Warohunugaraiia told Warohunuga to get down into this hole and to scoop the earth out with his hands. When he got down into it the brothers took up the biggest post and let it down into the hole on top of him. But a voice spoke to them from the top of the post and there was Warohunuga perching on the top of the post. (In a similar manner the brothers of Qat let him descend into a hole to dig for a crab, and whilst he is in the hole they try to kill him; and in the story of Barkulkul and his adulterer brother of South Pentecost, which resembles

1) See also Fox 263 298, 362. 2) 263 298, 362. 3) The myths quoted come from the nearby and culturally closely connected Ugi Island. 4) For this myth see Fox 263 155-160.

the analogous story of the Ambat, Barkulkul orders his brother to dig a hole in order to dig up a rattan, and when his brother is in the hole he kills him.) The brothers then decided to kill him in another way, and their eldest brother said to them: "We will take our canoes and go out in them saying we are going to look for a giant clam". And the eldest brother invited Warohunuga to come with him in his canoe. So all the canoes paddled out, and when they got near the giant clam all the canoes sheered off in fear, lest it should close upon them. But the one canoe in which the two brothers were, kept straight on towards the clam, and soon got to where it was. "Jump down and bring it up" said Warohunugaraiia to Warohunuga. Now, Warohunuga had been chewing betel nut. He jumped overboard and dived deep, and as he did so he spat out the red betel juice and all the waters were stained blood red. His brother was sure the clam had killed him and paddled home. Meanwhile Warohunuga took the giant clam and swam under water with it to the landing place, which he reached long before the brothers. And when they landed they were surprised to find him there. The clam was then cooked and eaten. Then the brothers try to kill him by persuading him to catch a big man-eating fish. He is swallowed by the fish, but cuts up the belly of the fish with a piece of obsidian and swims to shore. Then they try to kill him by letting him hunt a big wild boar, but he kills the boar. Finally they tried to kill him in the following way: They made a big oven and Warohunugaraiia seized his brother and threw him in, and all the brothers threw the hot stones on top. When after a long while they opened the oven, they heard a voice behind them and this was Warohunuga sitting behind them. Then Warohunuga made a small oven and told his eldest brother to lie down in the oven. He did so, thinking no harm could come to him in such an oven, but when Warohunuga after a while opened the oven there lay Warohunugaraiia cooked and Warohunuga and his brothers ate him.

The attempted killing with the giant clam agrees completely with the story of the Ambat brothers of Seniang who tried to kill Ambat by persuading him to dive for the giant clam. The association between the giant clam and the Ambat appeared also in the Seniang myth, relating that the giant clam which was killed by Ambat becomes his island, or in the Mewun myth, according to which the giant clam caught by Kabat turned into a woman whom he marries. A corresponding version was found in Santa Cruz, where Mosigsig, whose association with Qat has already been shown, killed the giant clam. The brothers who fled in fear of the giant clam resemble the brothers of Ambat, who, in the Seniang version, fear to approach the clam. Regarding the connection of the clam shell and the Arahā, Fox says: "The pearl shell (in this he follows PERRY) and the clam seem to be connected with Arahā" and he mentions a number of ornaments made of the shell of the giant clam which may be worn by the Arahā only, and which, according to him, are "strictly

Araha" 1). There is still another point in favour of the connection of the clam shell with the Araha. Fox records that on the road by which the Araha ghosts travel to the afterworld, there is a giant clam fixed fast to a stone which is itself believed to consist of clam shell 2). The killing of the man-eating fish was also one of the deeds of Mosigsig of Santa Cruz, whose identity with Qat has been shown.

In somewhat modified form the theme of the clam shell appears again in connection with the giant warrior Rapuanate who cut off the heads with a shell and who is known in Saa, Ulawa, Ugi, Three Sisters Islands, and San Christoval 3). By an analysis of the names of the mythological characters which are connected with Rapuanate, IVENS makes it seem probable that Rapuanate also belongs to the stone-using immigrants, and it may be mentioned that the brothers of Rapuanate fought with bows 4). Rapuanate is reputed to have been able to carry a huge clam shell under one arm, and visitors to Malau Lalo are shown the clam shell 5).

Another Arosi myth records the story of Suganainoni, a legendary hero who was born from a dead woman. To avenge his mother, who had been killed by a sky spirit, he made a fire and ascended to the sky by means of the smoke, whence, after accomplishing his purpose and having many adventures, he returned in the same way 6). The following reasons support the opinion that this myth belongs to the Qat cycle: the birth from a dead woman agrees with the Maevo myth according to which the two children of Qat's sister who had been killed by Taso, become free after the decomposition of their mother's body 7). We have already come across the story of the killing of the ogre (here the sky-spirit) by the children (here the child of this woman) in Maevo, Tanna and Santa Cruz. We have shown to what extent all these myths are associated with the myth of Qat. The ascension of a child in smoke to the sky, and his later return, has been found on Tanna where this story also had associations with the myths of Qat; in the same way the winged woman of Mota, and Mauitikitiki of Tanna who had many of the characteristics of Qat ascended to the sky in smoke. It has frequently been seen that the winged women were closely connected with Qat and the ascension to, or living in the sky, was found to be very characteristic of the culture heroes and occurred in connection with Tagaro of Aoba, Pentecost, Vao and Malo, Hambut of Lagalag, etc. For all these reasons we are entitled to class this San Christoval myth with the myths of the Qat cycle.

It is also evident from the following myth of Bauro that the themes of the Qat-Ambat-Tagaro mythology have spread to this region of San

1) 263 294 ff. 2) 263 285. 3) Fox 263 162 f, 171-173, COOMBE 170 259 f.
4) IVENS 403 477-479. 5) IVENS 403 479. 6) Fox 263 336. 7) It may also be mentioned that there is a clan in Ulawa which is said to have descended from a child born of a woman who had been some days in her grave. Fox 263 345.

Christoval¹⁾. A man, Waipua, climbed up an areca tree, but just as he stretched out his hand to pluck the nuts, the tree lengthened. At last he noticed the branch of a banyan almost within reach, and he thought if he stood on the branch he would be able to grasp the bunch of areca nuts, so he stepped on to the branch; but as he did so the areca nut tree sank down, and he was left perched upon the bough of a larger banyan in the country of the sky. Then there came two beautiful girls who took him home to their village. After some time the parents went away, but before departing they warned their daughters not to lift the stone, or the man could look down and see his home and desire to return to it. But Waipua heard their words, lifted the stone and saw his country and a great longing seized him to return to his home. So they made a platform, and sat on it, and let themselves down and reached the ground. There Waipu lived with his two wives.

The lengthening of the tree, as was found before, is one of the typical themes of the Qat myth. The banyan as a vehicle for reaching the sky occurred in the Maevo myth where a banyan root follows the arrows which Qat shot into the sky, and on which he followed his sky-woman into the sky. In Pentecost the arrows shot into the sky by the son of Tagaro "turned into something like the aerial root of a banyan" up which son and mother climbed to heaven to Tagaro; Ambat liberated himself and his brothers from the pit of Nevinbumbaa by following a banyan root, and in the analogous myth of the Torres Islands, Marawhihi liberated himself and his companions by means of a banyan root from the pit of Dilin-gavuv. The ascension to, or living in the sky as a characteristic feature of the culture heroes need not be reiterated here. The discovery of the earthly home and the return to it we have found in the same form in the myth of Santa Cruz, and in that of Tanna in connection with the child who had ascended into the sky in smoke, and whose association with the Qat-Ambat-Tagaro mythology has just been mentioned. And the marriage of Waipu with the sky-women agrees with the familiar story of the sky-woman who is married by Qat in Maevo, probably also in Meralava and Mota, and by Tagaro in Aoba. The numerous associations of this story with the Qat-Ambat-Tagaro mythology were evident in Pentecost, Fate, Tanna, and Santa Cruz.

Also the myth of the unsuccessful attempt to climb into the sky which we have mentioned from Lambumbu and Vao Island occurs here again, and is attributed by Fox to the culture of the Araha²⁾. Here it is said that the people built a high stair-way which fell down and killed them.

The story of the fishing up of the island occurs too on San Christoval³⁾. It is related that Arosi itself and, indeed, San Christoval and the neighbouring islands, had been fished up from the sea by Aomarau (Mauwa in the Ulawa story). There is a point near Anuda in Arosi covered with

1) Fox 263 122 f. 2) 263 336. 3) Fox 263 10.

pale yellow clumps of bamboo. Aomarau in his haste let his rod fall, hence the bamboos growing so thickly on the point.

Another myth¹⁾ relates the story of Hau huari'i, a famous stone of diorite who went on a journey from Waimarai in Arosi to Malaita, and remained there. Once Huari'i was at Maro'u Bay and fished up Guadalcanar—having already fished up Malaita and many other islands—when he heard the cracking of the Rohu cliff. He ran to help and left his footprints deeply imprinted on the rock at the east end of the bay, where they may still be seen—human footprints. The cracking of the Rohu Cliff and its tilting over is a very famous event. The dancing Kakamora ran to help, to hold up the rock, which is the pillar on which San Christoval rests. Disaster would have resulted if the Kakamora had not arrived and bound it up with creepers.

Near Ubana are what are called human footprints in the rock, those of Uraurasihoa i.e. "Passing Stranger" who, according to another myth, was fishing up Malaita as he stood there. But they are not carved and only imaginary footprints²⁾.

The incident of the fishing up of an island has been observed in connection with Ambat in Seniang, Mauitikitiki in Fate, Moshikishiki in Futuna and Aniwa, Inhugaraig in Aneityum, Tafiki and Metikitiki of Tikopia, and Mosigsig of Santa Cruz. That the Rohu Cliff is considered to be the pillar on which San Christoval rests, and which Hau huari'i had to prevent from tilting over in his fishing-up operations, is very strongly reminiscent of the fact that many of the artificial islands of Malaita, as will be seen later, were constructed round a natural rock. Fox has attributed this theme of the fishing-up of the island to the Araha³⁾. If it is true that the Araha are identical with the Qat-Ambat immigrants, it is in fact to be expected that this theme belongs to the Araha, since in the New Hebrides we have attributed it to the Qat-Ambat culture. The leaving of footprints has already been encountered in connection with Kabat of Mewun, Mreie and Supua of Epi, Maui of Fate, and the other analogous characters of Futuna and Aniwa, i.e. the representatives of the stone-using Qat-Ambat immigrants. It is therefore highly significant that the being which fished up Guadalcanar, Malaita, and several other islands, and which also left its footprints behind, was a stone, and that it voyaged to Malaita, from where, the stone-using immigrants came to Arosi. And it is equally significant that the name of Uraurasihoa, who, according to another version, fished up Malaita, leaving his footprints there too, means "Passing stranger". It is remarkable that the Kakamora aborigines assisted Hau huari'i, or as we can say now, the stone-using immigrants, in the fishing-up operation of the island. Our attention was drawn to a similar incident in Seniang.

1) Fox 263 289 ff). 2) Fox 263 293. About the great number of rocks bearing a fancied resemblance to bonitos, drums, many animals and objects and also footprints, see Fox 263 290 ff). 3) 263 362.

There Ambat, in erecting his artificial island, was helped by the black-skinned woman Nevinbumbaa. This woman we have considered there as a representative of the aboriginal population, or of people whom the Ambat had brought with them on their immigration and whom they forced to work for them. That the Araha really forced the inferior population to work for them follows from the information which Fox gives about the mythological Masi people¹). The Masi are believed to be stupid. In this respect they resemble the Kakamora. They are also believed to have been employed in large numbers on great works, especially those of building or carving in stone, which connects them with the Araha, although, as Fox emphasizes, no one would think of calling them Araha. Their descendants are the skilled artisans, the canoe builders, the inlayers, the craftsmen, of later times. Their original home is said to be Ugi. The most probable, according to Fox, seems to be that they were the Ugi contemporaries of the San Christoval Kakamora. From the fact that the ghosts of the Araha on their way to Marau Sound go over Ugi and Three Sisters Island, Fox has concluded quite convincingly that the Araha originally came from the north-west and migrated over Marau Sound, Three Sisters and Ugi before they touched the northern coast of the main island of San Christoval²). Fox thinks that the Araha on their way over Ugi enslaved the Masi aborigines who, owing to the smallness of the island, were unable to retire into the interior as, according to him, was the case on San Christoval. "It seems to have been the custom of the Araha to employ large bodies of the original inhabitants of the places they conquered to work for them ... on their stone building enterprises, their canoes, and generally made useful workmen of them. In this way we account naturally for the legend of their stupidity, for their employment in large numbers on stone-work, for their connection with Araha, and for the fact of their descendants being canoe builders and carvers ... It is therefore suggested that the Masi were the slaves of the Araha, especially the population of Ugi, probably its original population, but possibly slaves brought in the crews of the Araha ships and settled on Ugi in colonies, living together"³).

We have now to discuss the figona serpent worship. It has been seen that a heo, which we have attributed to the Abarihu and more particularly to the Araha, is in most cases guarded by a figona. On the sacred dua stone walls running out into the sea, offerings were made to the figona-

1) 263 369 f. 2) 263 285, 362. 3) It will be seen later that Rokola and his carpenter clan came to Fiji with the stone-using immigrants. This carpenter clan were the builders of canoes and also erected stone-work, and this would incline one to the view that the carpenters and stone-workers were slaves whom the Ambat and Araha brought with them on their immigration. But it is highly doubtful whether this comparison is permissible, since there is no mention of any cultural, social, or racial inferiority of the carpenter clan in Fiji; on the contrary, its members must be considered as a group of the stone-using immigrants themselves, who differ from the others only by their specialisation in certain works.

fellow of Hatuibwari, and, in the *pirupiru*, offerings were made to the *figona*. At Aofa, on the top of the sacred mountain Hoto, where the serpent spirit Hatuibwari came down and created the first pair out of red clay, there is a stone altar, a great round heap of large blocks of diorite. Here people offer sacrifices¹⁾. Fox has in fact attributed the *figona* serpent cult to the Arahā, since, as he argues, the chief serpent deity Hatuibwari "is the chief Arahā deity and connected with the sky"²⁾, and Mwara and Amaeo, who belong to the stone-using immigrants Abarihu, like the Arahā themselves, pray to it also³⁾. Since the *figona* cult is widespread in the Solomon Islands, it is all the more important to justify Fox's attribution, and for this purpose we must quote and then analyse the story of Hatuibwari. Hatuibwari (variations of this name are: Hatoibwari, Haudibwari, Hasibwari, Kahausipwari (Bauro), Kahuahuarii (according to COOMBE) etc.) lives at the same time on the summit of a mountain and also in the sky. This is a female *figona* spirit in the form of a winged serpent (with female breasts and a man's face). From the sky she came down to the summit of the mountain. She created men, animals, and their food, pigs, fruit trees, coconuts, yams, etc. and originated the harvest festival; embryos are said to be put by her into the womb of women. Once when her daughter went to work she left her child in the charge of her mother Hatuibwari, who coiled round her grandson. While the child was crying his father came home, and seeing the serpent strangling his son, as he supposed, not knowing that the serpent was his wife's mother, chopped the serpent into pieces with a knife. But the pieces united again. Offended, the snake left them saying: "I go, but your crops will fail", and since her departure everything has deteriorated. She went off to Ugi, Ulawa and Malaita, but left these places again, since from them she could see her old home which she no longer wished to see. Then she went to South-east Guadalcanar, after which she returned to the south coast of San Christoval. A yam which she had taken with her, she ejected here, and from this came all sorts of yam. Finally she remained on the mountain Bwari in Guadalcanar, since from here she could not see her old home. Under this mountain lies Maraba, the afterworld of San Christoval. There is a river and when a ghost bathes in it, it becomes a *figona*, and thus akin to the serpent spirits *figona*. *Figona* spirits are worshipped at S.E. Guadalcanar, probably Aola on the north coast of Guadalcanar, Ulawa, Three Sisters Islands, etc.⁴⁾.

Now the following questions arise: are we entitled to identify this winged female snake who comes from the sky with the winged sky-women of the New Hebrides and (the stars) of Santa Cruz? We have seen that in some cases the introduction of some of the food plants, particularly of the yam, was attributed to the sky-women. On the other hand, the crea-

1) Fox 263 287. 2) 263 325, 360. 3) Fox 263 298, 360. 4) Fox 263, 30, 79-86, 234-240, 298, COOMBE 170 234 f, CODRINGTON 160 150, 179, 162 298 f.

tion or introduction of all things, food-trees, pigs, including the creation of man, etc. is not a characteristic attribution of the sky-women, but of the culture heroes Qat, Ambat, Tagaro, etc. The story of the snake whose human daughter marries a man who later kills the snake when he sees it coiled round their child, was found to exist in exactly the same form in Hiw Island (Torres Group) ¹⁾, the Banks Islands ²⁾, and in a similar form in Epi ³⁾ and Maevo ⁴⁾. In all these cases the snake is female, and in Maevo it has a female human head. In the Torres Islands, Banks Islands and Epi, the coconut originates from this snake. On the other hand, we have seen that the coconut sprang from the head of Hambat in Lambumbu, and from the head of a snake in Big Nambas. The snakes from the head of which the coconut sprang in Tanna and Aniwa were the culture heroes Tangalua and Tangaroa, and the sea serpent was the chosen abode of Moshikishiki of Aniwa. Further arguments have already been advanced in proof of the connection of the coconut with Qat-Ambat, and we have expressed the opinion that the other snakes mentioned which brought forth the coconut must also be associated with the culture heroes. This would apply equally to the snakes of Hiw Island, of the Banks Islands, Maevo and Epi from which the coconut sprang, and the story of which is identical with that of Hatuibwari of San Christoval. From this it follows that the female culture bringer Hatuibwari is identical with the culture heroes of the New Hebrides. In support of this we may add that the final departure of Hatuibwari agrees with the final departure which was found to be a very characteristic incident in connection with Qat, Tagaro, Barkulkul, Nobu, etc. of the New Hebrides; that everything deteriorated after Hatuibwari's departure is identical with the fact that most of the culture heroes of the New Hebrides took all the good things with them when they departed and that accordingly the people regretted their departure. The association of the culture heroes with the sky which was found to be one of their most characteristic features, appears here again in connection with Hatuibwari. It is moreover probable that the connection of Hatuibwari with the after-world corresponds to the fact that Yetar of the Sakaos ate the souls in the sky, and that Takaru of Malo was the ruler of the afterworld. Are we entitled to compare the putting of the embryo by Hatuibwari into the womb of women with Yetar of the Sakaos and Tautai of Tismulun (Santo), who came from the sky to separate the limbs of a child when it was still in the womb of the mother, or the man of Santa Cruz who from the sky cut the babes from the womb of their mothers and whose association with the Qat-Ambat-Tagaro mythology has been shown? In any case this putting of the embryos into the womb of women equates Hatuibwari to Hambat of Lagalag who let down the first child from the sky by its umbilical cord, and to Taghar who put the souls of children in the moon from where they

1) DURRAD 205 III 197 f. 2) FOX 263 83. 3) RIDDLE 718 162 f. 4) CUDRINGTON 160 404-406.

fell down to Vao. Further it must be noted that the route followed by Hatuibwari over Ugi, Ulawa, and Malaita to South-east Guadalcanar corresponds closely to the way followed by the Araha ghosts. It is thus apparent that the story of Hatuibwari contains similar themes as the stories of the sky-women on the one hand and those of the male culture heroes on the other. In view of the numerous other very remarkable resemblances with the myths of the New Hebrides these similarities become still more significant. For these reasons Fox is certainly right in surmising that Hatuibwari, as well as the figona cult in general, forms part of the culture of the stone-using immigrants Araha¹⁾.

Owa Raha and Owa Riki. In most respect the culture of these two islands adjacent to San Christoval, called by the Spaniards Santa Anna and Santa Catalina agrees with that of San Christoval. Racially and linguistically the inhabitants are Melanesians, and as do those of San Christoval they also contain a large proportion of light-coloured and straight-haired individuals²⁾. Very intensive trading relations exist with Saa, Ulawa, San Christoval and even with Malaita³⁾.

With regard to the social organization, the same problem arises as on San Christoval. Whereas BERNATZIK records a number of clans, among which Amwea and Atawa appear again⁴⁾, Fox maintains that all the clans belong either to Atawa or Amwea which themselves therefore represent an older dual system⁵⁾. As on San Christoval, Atawa must not drink here of the pale yellow coconut⁶⁾. A chief is called "mwane raha", mwane = man, raha = big⁷⁾, as on San Christoval where all the men of the Araha clan are called "great man" or "chief"⁸⁾. Also the Kakamora are known here as well as on San Christoval⁹⁾.

The sacred canoe house (aofa) in which the sacred canoes for the bonito fishing are kept, together with the wooden fishes containing the skulls of the chiefs, are identical with the canoe houses of San Christoval¹⁰⁾. BERNATZIK¹¹⁾ gives the following description of the canoe house he shows on Pl. 2, p. 22¹²⁾: a) inner stone wall about 3 feet high; b) exterior stone wall, on the east side, about 3 feet thick, serving as protection for the aofa which, at high tide, could be reached by the waves. Both exterior stone walls at their northern end form a stone platform 2 feet high. c) the northern side of the aofa is formed by a balustrade of palm trees.

1) In Saa and Ulawa the ghost of a chief is called hi'ona or li'oa (IVENS 403 180 f, 119, CODRINGTON 160 260), two words the etymological identity of which, however, according to IVENS, has not been proved (403 486 Note 2). But the conception of a snake is not connected with it (IVENS 43 273 f, 467). 2) BERNATZIK 71 6, 15, 16, GUPPY 315 280, 314 194. 3) BERNATZIK 71 46, 65, 77, 83, 88 f, 91 f, 112, 213 etc., 70 36, 45, 52 f, etc. 4) BERNATZIK 71 105 f. 5) 263 71, 351. 6) Fox 263 74, BERNATZIK 71 105. 7) BERNATZIK 71 61, 110. 8) Fox 263 14. 9) BERNATZIK 71 42, 247. 10) BERNATZIK 71 24 f. 11) 71 22. 12) See also: BERNATZIK 71 26 and Pl. 3, PARAVICINI 626 146 f, Pl. 55.

The construction of the ordinary canoe houses agrees most nearly with that of the sacred canoe houses, but has, characteristically, no stone walls ¹⁾).

The figona cult which, on San Christoval, has been attributed to the culture of the Araha, exists here also, but BERNATZIK maintains that it

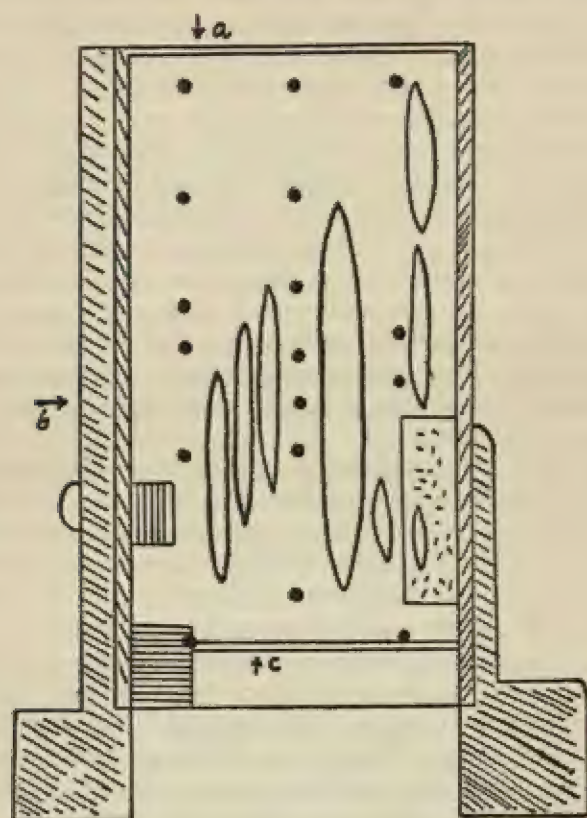


Fig. 11. Sketch of sacred canoe house, Owa Raha (After BERNATZIK 71, Pl. 2, p. 22).

was introduced quite recently only from South-east San Christoval, when the mission settled down there and the natives gave up the cult ²⁾. Hatuibwari is not worshipped here, but is known to the natives by the name "Haytoweri". She is said to dwell on San Christoval ³⁾. In Natagera village on Owa Raha the figona had a sacred house, the main post of which is considered to be the seat of the figona. This house is surrounded on all four sides by a stone wall 2 feet 8 inches high ⁴⁾. The house of the magician is

1) BERNATZIK 71 31. 2) BERNATZIK 71 248 f. 3) BERNATZIK 71 249. 4) BERNATZIK 71 32 Pl. 4 and 5.

of a somewhat similar construction as the figona house, but is lower, so that the roof comes down to the ground and there are therefore no side walls. The front and the back are closed by a stone wall. A hole just big enough to allow the passage of one person is left in the front wall. This hole is generally closed by a mat¹⁾.

According to PARAVICINI and BERNATZIK the villages are surrounded by dry built walls²⁾, but BERNATZIK again maintains that these walls are quite recent and were only built by order of the physicians who were sent to this place by the government after 1918. The pigs which propagated the ringworm disease were thus to be prevented from penetrating into the villages. BERNATZIK says he has found no stone walls round old villages³⁾. In his work *Chez les Cannibales* published in 1903 *FESTETICS DE TOLNA* on p. 299 publishes a picture of Owa Raha in which a part of a stone wall is visible. But since no mention is made regarding the character of this stone wall, we do not know whether it is a village stone wall. In view of the many types of stone walls and also walls round villages on San Christoval and particularly Arosi, the lack of walls here would certainly be somewhat astonishing, therefore BERNATZIK's interpretation is perhaps open to doubt.

The gardens are surrounded by a high stone wall to protect them from the incursion of pigs⁴⁾.

The burial places are in the middle of the village. They are surrounded by a wall of coral limestone about 5 feet thick⁵⁾.

On Owa Raha idols of soft tuff are carved and kept in every house⁶⁾.

Sacred Plants. The same divination rite as that connected with the female figona serpent Kagauraha of Bauro is also recorded on Owa Raha in connection with the analogous serpent spirit "Kauraha", worshipped here ("ka" is the female prefix in Bauro)⁷⁾. If they wish to know whether to go to war or not, the old men take into the figona house of Kauraha a red strip of the sacred dracaena leaf. They then pull apart the two ends, and if the strand breaks they do not go to war.

Regarding this figona Kauraha, COOMBE records the following⁸⁾: "The people of Santa Anna worship a great snake, Kauraha, and her brood, who inhabit a small cavern. On the walls are drawings and carvings of sharks, frigate birds, etc. As on the mainland these snakes also receive an offering of first fruit". Fox has shown that in Bauro the analogous Kagauraha figona snake is in some way representative of Hatuibwari⁹⁾. It is significant that the analogous petroglyphs, which, in the Three Sister Islands, we have attributed to the Araha are here associated with the figona serpent Kauraha, the worship of which as well as of Hatuibwari, must be attributed to the culture of the stone-using immigrants.

The maraufu ceremony and the ritual bonito fishing associated with the

1) BERNATZIK 71 31. 2) 626 146 f, Pl. 51, 71 14 f. 3) 71 14 f, 17 f, Note 14 p. 271 f. 4) BERNATZIK 71 67. 5) BERNATZIK 71 17, 21, 216 f, 222, GUPPY 314 53. 6) PARAVICINI 628 20. 7) Fox 263 237. 8) 170 236 f 9) 263 79 ff.

Araha in San Christoval, also exist on Owa Raha and Owa Riki with but slight differences¹). Before the beginning of the bonito fishing in the maraufu ceremony, the priest performs the following divination in the sacred canoe house: he rolls together leaves from a bush with red leaves called "siri". If the roll stands upright, the dead are likely to help and the bonito fishing takes place; "siri" leaves are fastened to the canoe after having been consecrated to the ghosts; the first bonito (waiau; this is the same word as used in San Christoval) caught is wrapped by the priest in a "siri" leaf and the maraufu novices put "siri" leaves in hair and belt for the bonito fishing²). It is certain that the "siri" leaves are identical with the "diri" or dracaena leaves of San Christoval, and on Owa Raha and Owa Riki we thus find the same association of the dracaena with bonito fishing and the cult of the dead as on San Christoval, and for this reason, among others, we have concluded that the ritual use of the dracaena and the other sacred plants must be attributed to the culture of the stone-using immigrants Araha.

Prehistoric objects. I am not aware of any prehistoric finds, but BERNATZIK mentions stone pestles which, together with wooden pestles and wooden mortars, are still in use to-day³).

Mythological evidence. A very interesting game, in fact a historical drama, has been witnessed by several observers on Owa Raha: A group of natives assembled in the bush behind the village. Their bodies were completely covered with white paint; they wore masks of beaten palm bark on their faces, and were armed with big bows and arrows. (These weapons are not used by the present natives.) The masked men made grotesque movements walking with bent knees, and, as BERNATZIK thinks, endeavoured to appear small. They were called mako-mako ai-matawa, mako-mako meaning "to cover yourself with earth or mud" and ai-matawa meaning "the men from the distance". Suddenly a canoe appeared on the shore in which another group of natives were sitting who had painted their bodies dark with charcoal. The canoe beached and the dark men landed. They were armed with the typical wooden spears of the present natives of Owa Raha and Owa Riki and wore strings of cowrie shells as ornaments on their foreheads. A few of the men had fastened coconuts between their thighs and others wore carved wooden bowls on their heads. They were called Ai-Fonofono, which means "the men from Fonofono". None of the people could say where that was, but all were sure that it was somewhere in the west, says BERNATZIK⁴). The two groups now approached

1) BERNATZIK 71 22, 84, 191 f, 70 30, 47, KÜPER 446 1. 2) BERNATZIK 71 194 f, 197 f. 3) 71 41. 4) The geographical position of Fonofono, however, by no means seems to be certain. Owing to the fact that Fonofono was one of the islands known to the Taumako Island people, and since a man of the Lau Island Sulu Vou, whom WOODFORD asked whether he knew of any islands to the east or southeast of Malaita, answered that he knew of Sikaiana and Fonofono, adding also that

one another cautiously and the leaders examined each other. Suddenly one of the masked men stumbled, hurting his foot on a stone, upon which he was captured by the black people who dashed his head with a club. Upon this the other white people ran crying back into the bush.

According to the explanations given by the natives, this game represents the immigration of the Melanesians to Owa Raha and Owa Riki. The black coloured men played the rôle of the present Melanesian population of both islands. The coconuts fastened between the thighs of the black immigrants were intended to recall the fact that it was they who brought the disease of elephantiasis. The wooden bowls were intended to show that the art of wood carving was introduced by them; by the cautious examination of one another they wanted to express that neither group was sure whether the other were men or ghosts. When one of the white people stumbled the others knew then that he was a human being and made him a prisoner ¹).

BERNATZIK and KÜPER have expressed the opinion that the light coloured people represented a light-skinned, small-statured, aboriginal population. Fox ²) has criticised this opinion and has rightly pointed out that the name "ai-matawa", "the men from the distance" contradicts this, and he thinks on the contrary, that they are identical with the Atawa of San Christoval ("Atawa" = "the foreigners" or "people from over the sea")—immigrants, who also were said to be light-skinned. The bow and arrow as indicated, were the characteristic weapons of the Araha and the other stone-using immigrants. If, as we think, the Atawa belong to the same stone-using immigrants as the Araha,—an opinion which, besides the reasons enumerated in San Christoval, is further supported by the fact that here also the Atawa have the taboo of the pale coconut and that, according to BERNATZIK, Atawa is a clan only,—the use of bow and arrow by the "mako-mako ai-matawa" is quite natural, since we have found bow and arrow to be the characteristic weapons of the light-skinned stone-using immigrants.

It is probable that these dark-skinned Melanesians can be identified with the Mono-Alu Melanesians whose migration from New Georgia to the north-west will be discussed later. They must have migrated to the south-east also, which explains their western origin on Owa Raha and Owa Riki. This supposed identity is further favoured by the fact that the Mono-Alu Melanesians also came to Buin and the Shortland Islands later than the stone-using immigrants ³).

The myth of the fishing up of the island occurs again on Owa Raha ⁴). It is recorded that in very ancient days, before Owa Raha existed, a turtle

a canoe drifted ashore at Sulu Vou from Fonofono, WOODFORD concluded that Fonofono "may be a collective name for all the Reef Islands near Santa Cruz". 984 40 f. 1) BERNATZIK 71 122 f, PARAVICINI 626 148, KÜPER 445 162-165.

2) KÜPER 445 165. 3) With regard to the relationship of these dark-skinned Melanesians with Fox's "Bird Totem People" see Fox 263 351, 368. 4) Fox 263 29, 72 f, BERNATZIK 70 8, 13 f, 71 143.

lived on the neighbouring island of Owa Riki. This turtle had two children, a boy and a girl. The children noticed that the turtle used to take coconuts, bananas, yams, taro, and wild almonds and plant them on a certain spot at the bottom of the sea, not far from Owa Riki, and they asked their mother her reason for doing so. The turtle, in reply, told her children to make a hook from a piece of her shell, and when they had done this they paddled in their outrigger canoe to the spot where the turtle had planted the food plants under the sea. There they cast their hook, which the turtle fixed on to a rock below and the children pulled, but the rock broke. However, the turtle fastened it to another rock, and the children hauled on the line, and up came Owa Raha already prepared and planted. On the east side of the island there is the broken rock where the hook failed at the first attempt. The names of the children of the turtle are Waikarinoparisu and Kapwaronaro. The girl Kapwaronaro bore children, and it is from them that all the turtle people come.

Here we have once more a number of characteristic themes. The culture hero who fishes up the island plants fruit trees and other food plants on it or introduces them; the traces left by the hook are in a way reminiscent of the footprints left by the culture hero during the fishing-up operation. The culture hero in the shape of a turtle occurred in exactly the same manner on Aneityum, where Inhugaraig who also fished up the island and set men and women upon it, had a shell like a tortoise which he left behind when he travelled.

Saa and Ulawa: We can treat these two regions together, since there is a strong cultural and linguistic resemblance between them¹). The language is Melanesian containing many words similar to Polynesian²). Racially, except for a few dark elements, most of the people are of a chocolate brown colour³). There are many cultural similarities with San Christoval. Trading relations exist with San Christoval, as has already been mentioned, and also with Malaita, Ugi, Guadalcanar, Owa Raha, and Owa Riki, and reciprocally between Saa and Ulawa. In Saa, the people of Arosi and Ulawa are even "regarded as countrymen", and there is "constant communication during the summer months with Arosi"⁴). A mythological population called Masi in Ulawa, who are exactly the same as in San Christoval, and the Rere ni Mesi in Saa, as well as the Mwasiu and Muumuu who correspond to the San Christoval Kakamora and are widely known in Melanesia⁵), all show the relation with San Christoval which is also evident from the fact that the chiefs are called "alaha", corresponding to the San Christoval "Araha"⁶).

1) See: IVENS 403 XV, 54, PARAVICINI 626 150. 2) RAY 705 47. 3) IVENS 403 20. 4) IVENS 403 28, 39 f, 154 f, 225, 291, 328, 390 ff, 439, 487, etc. 5) FOX 263 138-142, 144, 148, 345 f, IVENS 43 4, 409 f, 412, CODRINGTON 160 355, 6) IVENS 403 64, 198, 411 34, FOX 263 344.

The sacred canoe house "taoha", the "oha" of San Christoval and "aofa" of Owa Raha and Owa Riki, agrees completely both in appearance and function with that of San Christoval and Owa Raha and Owa Riki. The bonito canoes and rods were kept in them, the malaohu (corresponding to the maraufu of San Christoval, Owa Raha, and Owa Riki) segregated in them, etc. 1). The walls were built of loose coral stones, and are called liliheu and a platform of stones, rāi seu, juttied out from the end of one or both walls 2). On this the coconuts for sacred purposes were stored, and bonito were placed when caught. To make the oversea canoes formally open to women, a woman places areca nuts on this place addressing the ghosts of women who had acted in a similar capacity in the past 3).

In certain hamlets at Saa, there is more or less of an appearance of house mounds, "but speaking generally there is nothing to correspond to the Fijian Yavu" says IVENS 4).

Sacrifices were carried out at altars situated either inland or close to the beach. These altars consisted of an outer circle of coral stones piled up one upon the other in the form of the loose stone walls called liliheu. Inside these stone circles there is a sacrificial fireplace. Trees of sacred character such as dracaena and evodia, are planted inside and outside the wall. The one term pirupiru is used at Ulawa for both inland and beach altars, but at Saa the inland altar is called te'ete'e and pirupiru is the beach altar 5). The following sacrifices are offered at these stone circles: first fruits, a pig for a delivery, a pig before war to the ghosts of certain chiefs, the first flying fish, the first bonito, porpoise teeth, etc. 6). The connection with the pirupiru of San Christoval, in spite of certain differences, is evident and need not be discussed further. Whereas the skulls were buried in the pirupiru of San Christoval, the bones of important people were deposited in the altar of Saa. The bones of men were placed inside the circle, the bones of women outside it 7). Also sacrifices for the ghost sharks (pa'ewa, the pagewa of San Christoval, Owa Raha and Owa Riki) are offered at these beach altars in the same way as at the San Christoval pirupiru 8). In San Christoval we have attributed the shark cult to the Abarihu immigrants and there

1) IVENS 403 34 f, 117 f, 131 ff. 2) The word rāi, according to IVENS' opinion, may be a methathetic form of the Arosi word ariari; seu or sāu means bonito, but a shoal of bonito is called wāieu, IVENS 403 34, 334, corresponding to the "waiau" "bonito" of San Christoval, Owa Raha and Owa Riki. 3) IVENS 403 34 f, 308. 4) 403 375. 5) To this IVENS remarks: "I can offer no suggestion as to the derivation of the word pirupiru, but the word te'ete'e certainly refers to the skins, te'e, of areca nuts which were thrown into the inland altar for purposes of black magic". (403 246). In the chapter on San Christoval we have seen that Fox derives the word pirupiru for stone fences from the name of the pirupiru tree. It may, however, be noted that IVENS himself gives the word "piru ni' usu" = "circle of dog's teeth", for a necklace of dogs' teeth, usu meaning dog, ni expressing the genitive (403 404 f), so that piru would be likely to mean "circle", although this might be a later meaning of the word. 6) IVENS 403 247, 249, 283, 301 f, 312, 314, 364, 367-369, 450. 7) IVENS 403 214. 8) Fox 263 110, IVENS 403 235.

are a number of indications here which confirm this. The sharks help the people in their bonito fishing operations and are therefore invoked for the success in bonito fishing; men who during their life were renowned as fishers of bonito are held to incarnate sharks after their death; if a new canoe house is built a shark is believed to bring the gift of a handsome malaohu boy whom he has taken from somewhere in order to make the canoe house itself malaohu¹). This close association of sharks with bonito fishing, malaohu and the canoe house, and the connection of all these elements with the stone-using immigrants, and particularly the fact that the sacrifices for sharks were offered here also on the pirupiru, confirm the opinion that the shark cult forms part of the culture of the stone-using immigrants as Fox has concluded regarding San Christoval.

The "ring of stones associated with snakes" in Ripoo (Ulawa) which plays a certain part in black magic²) likewise belongs perhaps to these stone circles. But we have unfortunately no detailed information about this.

There are rocks in several places on Little Mala called Twin Rock. The belief was that any woman whose shadow fell on the rock would bear twins, or similarly any man would beget twins. A certain woman is supposed to have changed into the rock, and sacrifices are made to her and her husband and her ancestors. Offerings are made there also on behalf of the sick. In front of the Twin Rock which stands at Paasi, above Saa, there is an altar circle of stones. The top is roughly carved to represent a human head. Small rocks lying around are called the children of the Twin Rock. The Twin Rock at Ae'ulu is a round flint, and a face is roughly carved on it³). It is to be regretted that IVENS says nothing about the size of this stone, nor does he give any picture.

At Su'uholo, Ulawa, the carved stone image of a man has been set up in front of the canoe house belonging to his descendants, and it is believed that the stone guards the place and its people from sickness and malignant ghosts. The head of this man was washed up on the beach of Su'uholo after he had been killed on San Christoval. Eight flint stones alongside the image were called his sae, his internal appurtenance. According to IVENS' opinion the occurrence of this stone may be due to San Christoval influence⁴). These are the only data I know of regarding anthropomorphical carved stones and these unfortunately are not very definite. Their connection here with the cult of the dead is not so clear as it was in San Christoval where carved heads, stone statues, etc. were found on the heo, and where they were held to be the seats of the ghosts. But the twin stone which represents a certain woman changed into stone, and the carved stone image of Ulawa representing the ghost of a dead ancestor are

1) IVENS 403 180, 232, 235, 238, 240, CORRINGTON 169 179, 162 302, 164 64, COOMBE 170 248, FOX 263 110. 2) IVENS 403 285. 3) IVENS 403 77 i. 4) FOX 263 292, IVENS 403 257, 273.

sufficient indications that the conception here is the same as in San Christoval.

Inside every house at the foot of the centre post there was a square formed with logs and called poopoo. This was the receptacle for all scraps of areca nut. This square was put under the care of the family ghosts who were believed to protect the people living in the house. Just outside the front door was a similar sanctuary fenced round with stones and planted with dracaena, which also served the same purpose. In Saa this latter enclosure is called tapatapa, tapa = throw, in Ulawa it is called damuteke, areca nut (or other objects) falls down. In this enclosure the sorcerer planted the herbs which he used in his magic¹). As far as I can see, there is no agreement in the different notes of IVENS. At one place²) he says that the log enclosure is called tapatapa or ngolita. It is erected after the death of a chief in front of the chief's house and the people bring bits of treasure and throw them in in token of sorrow. Elsewhere³) IVENS speaks of "paraita, i.e. the sacred enclosure outside the house, planted with red dracaena and strong smelling herbs. The areca nut skins were thrown into it for safety to prevent them being used in witchcraft".

In Saa several kinds of taro were sacred and were reserved strictly for religious purposes. The peelings of these were not to be eaten by pigs, and to provide against this a rubbish heap is made with a stone fence round it, and into this the peelings were thrown. This rubbish heap was called inelu⁴).

In the middle of the village of Mwado'a, Ulawa, there are the remains of an altar, a cairn of stones, with red dracaena planted round it. This was the altar of certain ghosts who caused dissension and strife. The other villages have similar altars and all are alongside the main paths. To make operative the power of these ghosts it was necessary to place an offering on the altar and say the proper incantation⁵). These main paths bordered by stone altars are certainly reminiscent of the monolith bordered avenues which, in the New Hebrides, are found on Vao, Uripiv, Big Nambas, Lagalag and Lambumbu. These avenues play an important part also in connection with the malaohu ceremonies. These ceremonies of the stone-using immigrants occur in Saa and Ulawa in exactly the same form as the maraufu ceremony of San Christoval, Owa Raha and Owa Riki⁶). It is highly significant that at the "Sea feast", when the malaohu boys return to their village "the path to the village had in some cases been previously flagged with stones"⁷).

At the bathing place called I Ejei at Mwado'a, Ulawa, there are remains which are attributed to the Masi. The water for the bathing place comes down a ravine and falls over a rock face of soapstone. Seven cuts have been made in the top of the soapstone, and bamboos inserted into these provide

1) IVENS 403 277 f. 2) 403 215, 221. 3) 408 192, 194. 4) IVENS 403 367.
5) IVENS 403 283. 6) See IVENS 403 142, 145 f, 233. 7) IVENS 403 142.

a flow of water for the people to stand under and wash themselves¹). On the rock face to the left are carvings of a frigate bird and of a man's head with a hat on, as well as a crescent-moon ornament (*dahi*). These belong to modern times and are made on the following occasion: after the death of a chief his relatives are forbidden to wash themselves for some time. The first time they go to bathe again they carve these figures of birds, fishes and men on the trees and rocks at the bathing place. They also build up a big cairn of stones from the river bed, probably merely as a memorial. Leading down into the pools there are large footholes cut in the stone. At the bottom of the pool the soft soapstone has been cut into the shape of a pig, 25 feet long, with its snout facing the pool. Furthermore there are a turtle and a crocodile cut in the rock much worn now²).

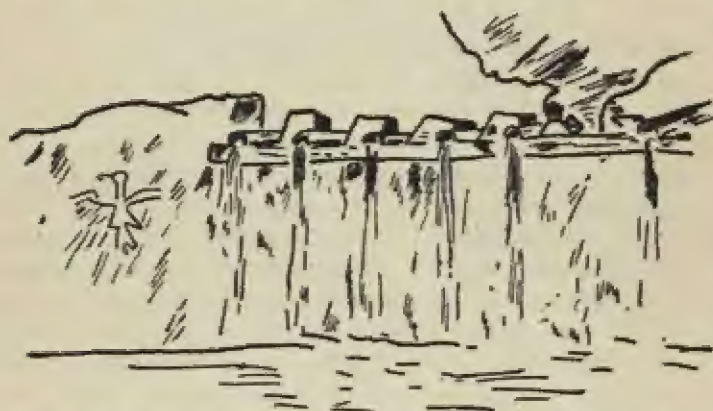


Fig. 12. Bathing-place at Mwado'a, Ulawa (After IVENS 403 411).

The fact that the stone carvings and the stone cairn are made by his relatives after the death of a chief (*alaha*) again shows the close connection of the *Alaha* with the stone-work, and clearly demonstrates that the *Alaha*, like the *Araha* of San Christoval, must be the megalithic immigrants. That the stone-work is attributed to the *Masi* agrees completely with the same information regarding San Christoval. The assumption that the stone-using immigrants *Araha* of San Christoval employed the *Masi* to carry out their works is thus also true for Ulawa.

Loose stone walls called *lilieu* are built to keep pigs out of gardens³).

In one of the villages of the Saa district, IVENS saw a well called "*kakalu*" which is evidently identical with the "*kakaru*" of Arosi. The well is some

1) Three of the cuts are of V-shape and four with square sides. The first three are said to have been made by the *Masi*, the other four, according to IVENS, in modern times with iron tools. According to Fox, all seven are made by the *Masi*. IVENS 403 411, Fox 263 293. 2) IVENS 403 227, 410-412, Fox 263 292-294. 3) IVENS 403 246.

10 feet deep and 8 feet wide, and is lined with stones up to the top¹⁾.

Of Saa, IVENS records a village "boundary stone"²⁾ and in Ulawa battle fields were marked with large stones³⁾, but in neither case does IVENS give any details regarding these stones, so that we do not know whether they are natural rocks or worked stones.

Sacred Plants. The close association of the trees of "sacred character", dracaena and evodia, with stone-work is again apparent from the data mentioned. Still further information can be added to show the important part played by these plants in Saa and Ulawa. The bonito rods had pieces of the "bonito-dracaena" inserted in their tips, which were cut so as to make a whistling noise when played. A certain shark is invoked for success in bonito fishing. All these incantations end with the formula "mana i eu dili" the meaning of which is not known, but "dili" is the word for dracaena. This formula also occurs in an incantation to Pua Tangalu as love magic. In an incantation for successful bonito fishing are the words: "A dracaena has mounted up there, a bonito has mounted up here". Here again the malaohu novices, as well as the men who take them out to catch bonito, have dracaena leaves tied round their necks, and a paddle is called "dracaena leaf". In Saa, when the bonito season arrived, the priest took a ha'u, an umbrella of pandanus leaves and went gathering twigs of the "dracaena-of-the-bonito", of an evodia and of numerous trees. These he inserted between the folds of the umbrella. The pandanus umbrella signified the "Maidens of the bonito"⁴⁾, for it is a woman's appendage. Due warning had been given of the coming of the bonito by the „Maidens" to the priest sleeping in the canoe house. These Maidens were beautifully adorned, the ornaments being those of a chief's daughter. The altar fireplace dedicated to the Maidens was a ring of stones on the shore. The first bonito caught was taken to the Maiden's altar. The priest put some twigs into the mouth of the fish. An unripe coconut of a special kind, light in colour, was tapped with the umbrella, and the question was asked "Shall we catch bonito?". Its contents were then poured on the bonito⁵⁾.

The dracaena is so often used in connection with bonito fishing that IVENS, as we have seen, speaks even of the "dracaena of the bonito". It is of interest that the ornaments of the bonito Maidens are the same as those of the chiefs' daughters, since, as will be seen later, here too the chiefs are the descendants of the stone-using immigrants, to whom the introduction of bonito fishing must be attributed. When offerings are brought for a ghost in Saa, a bit of the food is left unburnt, wrapped in a dracaena leaf, and put by the relic case of the man to whose ghost the sacrifice is offered. In Ulawa, elderly people often deprive their children of money by burying it in the ground. Then they plant two dracaenas to mark the

1) IVENS 403 Note 1 to p. 246 on p. 487. 2) 403 27. 3) IVENS 403 303 f.
4) For this see: IVENS 403 4, 130, 139, 178. 5) IVENS 403 34 f, 133, 136, 139-141, 232 f, 281 f, 290, 316, 353.

place, and make an offering to a ghost to prevent anyone finding it; leaves of dracaena and evodia are used in weather magic in Ulawa¹). In Saa and Ulawa a dracaena leaf is used in divination for the discovery of a thief, and in a divination performed with a dog, a twig of dracaena is tied round the neck of the dog; for an ordeal in Saa, an old spear is used bound round with dracaena leaves; the place where a man was sitting is struck with a dracaena in Saa and Ulawa; then the dracaena is put in the altar. Over a sick person the priest holds a sprig of dracaena, and those present have springs of dracaena in their ears; in an exorcism formula usual in Ulawa, the dracaena is mentioned; in an incantation to be said when rescuing a man from a shark (Ulawa) the setting up of sacred dracaena is mentioned; dracaena leaves are used in black magic against a garden (Saa) and in magic for spoiling a landing place (Ulawa); ginger is placed along with lime and a dracaena on the path of an intended victim; its magical effect is the production of sores; for the offerings of the first fruits of yams at the beach altar of Ulawa, the priest ties two yams together with sprigs of dracaena, and evodia is laid on top of them. In the Saa myth "The eight Muumuu", Kaakuu, whom the Muumuu wanted to kill, took a sprig of dracaena from his armlet and pronouncing an incantation over it, knotted it in order to make the Muumuu fall asleep. (This closely resembles the story of Rapuanate of Ugi who tied a bit of dracaena round his toe, to make his enemies sleep, a practice still common to-day.) Regarding the dracaena, IVENS says: "A definite idea of sacredness attaches to the dracaena at Saa and Ulawa" which "agrees with what has been recorded about it in many other places notably in Indonesia".—*Evodia hortensis* (mahe) is often used in magic; thus incantations are pronounced over sprigs of *evodia hortensis*, after which they are worn by the man in his armlet or his hair; *evodia* is used in weather magic also (Ulawa); at the time of offering of the first fruits in Ulawa, the share of the ghosts is covered with coconut leaves and *evodia*. When the Ulawa women bring the yam seeds to the garden for planting, the priest purges them ceremonially with a sprig of *coleus* lest the seeds shrivel and die. The coconut is used in the following magic of Saa and Ulawa: A coconut all covered with fish teeth is put in the enclosure at the foot of a pillar of the canoe house. This nut is spoken of as a young bonito. For successful bonito fishing an incantation is then pronounced. Coconuts used in the opening ceremonies when the first bonito had been caught were placed as offerings on the stone platform (*rai seu*) of the canoe houses and lay bleaching there²).

Mythological evidence. The Saa people say that the chieftainship on Little Mala is really one in origin and that the present day chiefly families are all related. The traditions speak of a time when the chiefs,

1) For the use of dracaena in magic see also the myth of Rahu Maa, IVENS 403 196-198. 2) CODRINGTON 160 137, IVENS 403 53, 87, 185 f, 190, 193, 203, 237, 266, 279, 280 f, 289 f, 316, 324 f, 327 f, 342, 348, 351, 360, 362, 369, 392, 415 f, 466.

who were all of one family, descending from one pair of ancestors, decided to make a move from Hunuuli on the main ridge of Little Mala, their ancestral home, doubtless under pressure of numbers, as IVENS thinks. Some went one way, some another, and chieftainship was established in Little Mala and remains to this day. IVENS gives a detailed record about the descent of these people from the main ridge and their founding of chiefly houses at the different places of Little Mala. The genealogy extends back for thirty-nine generations to the one pair of ancestors. The first male ancestor was "Lord spark of fire" who descended from heaven to Hunuuli and came to rest on the large board of a lodge when he came down in a flame of fire. He called the name of that lodge Awenga taro. His wife descended with him, and her name was "Light-complexioned woman". Then the people who dwelt at Hunuuli made a sanctuary for the two of them and built four stone walls round them. Then the two begat a son whose name was "Lord spurtling fire", of whom "Lord draw fire" was born. The genealogy then proceeds until No. 40. The honorific prefix Poro, Lord, used of great ghosts is prefixed to the first twenty-seven names of the genealogy. No. 30 is called "Eyes fighting champion light-haired", No. 33 is called "First to eat in sacrifice light-haired", No. 10 and 26 are called "Lord dracaena flower chief" and No. 14 is called "Lord dracaena leaf highness". From Hunuuli also, another migration took place twelve generations ago. There were four brothers. Their descent to the coast accompanied by a number of people, and the founding of chiefly houses is a historic fact. The eldest of the brothers, Pwaulo Päine, went to Saa, establishing a chiefly house there; the second brother went to A'ulu, also establishing a chiefly house there. IVENS gives us a detailed genealogy of these two families from their founder to the year 1925. The two younger brothers had the same name, Ro Ute seu oo'u, the "Bonito-gutter champion" ¹⁾. According to IVENS, Pwaulo's reason for migrating was not weariness of the fighting propensities of his brothers as CODRINGTON believed, but sadness over the death of his son and the state of unrest among the hill peoples, whose chiefs, one after another were moving shorewards. One of the local chiefs of Saa at the time of the descent was Teatea. Since Teatea bewitched one of the descendants of Pwaulo, he was killed. The evidence shows, says IVENS, that Teatea owned the boat harbour, Su'u Namona, at Saa. After Teatea was killed by the descendants of Pwaulo they at once seem to have entered into possession of his boat-harbour. "The boat-harbour they took because their eyes were on the sea, and they had visions of glory ahead in the matter of malaohu boys and feasts connected with the sea", says IVENS. One of the later descendants

1) There is no complete agreement between IVENS 403 113ff and CODRINGTON 160 48-50 who both record these migrations. Whereas CODRINGTON indicates Saa haalu as the ancient home from which the migration started, IVENS maintains that the migration started from Hunuuli.

in the chiefly line of Saa was Halu. That he had his eye on the bonito fishing is proved by the name which he gave to his son "Ohu seu", "Boiling Bonito". It was he, who made the first malaohu ceremony on the boat harbour for his sons. The lure of the bonito continued to be strong, and Halu's grandson was called "Sojourn in the bonito pools", and his grandson again "Halu swoop down on the pools", a reference to the frigate birds that accompany the bonito fish. There is still another chiefly name in Saa containing the word "seu", "bonito" ¹). One of the chiefs of the Saa line (Watemola) having no male heir bought a son from Big Mala. This adopted son held the second malaohu ceremony. He and his son were responsible for the building of the first canoe house at the boat harbour, and for the planting of coconuts on a larger scale. IVENS mentions another chief who made a malaohu ceremony and yet another who intended to do so, but died before he could carry out his intention, so that, in all, three complete and one abortive malaohu ceremonies were held in Saa ²).

We have here a piece of historical evidence such as is rarely found elsewhere in Melanesia. According to this the first chief and his light-skinned wife came down from the sky, and a sanctuary of stone walls was built round them, and some of the other chiefs were light-haired. The analogy with our stone-using culture heroes Qat-Ambat-Tagaro, etc. is beyond doubt. We have repeatedly found the culture heroes associated with the sky, or living in the sky, and many of the culture heroes were light-skinned, as were also the sky-beings associated with them; fair hair was only mentioned in Maevo in connection with the child we have identified with Qat. The association of these culture heroes with stone-work has clearly been worked out in the course of this study and appears in Saa in precisely the same manner. As in the other islands, these stone-using immigrants founded the chiefly houses and agree with those who in the graded societies of the New Hebrides were members of the highest stone-using degrees. It is of particular interest that here, the dracaena, whose connection with stone-work we have so frequently pointed out, forms an element of the names of the stone-using chiefly immigrants. It is evident that these immigrants, whose chiefly representatives are to-day called "Alaha", are identical with the Araha of San Christoval. In San Christoval we have attributed the ritual use of the dracaena and the other sacred plants to the Araha, and in the New Hebrides their introducers were the analogous Qat-Ambat-Tagaro stone-using immigrants. For these reasons we are all the more entitled to maintain that it was these stone-using chiefs of Saa who introduced the ritual use of the dracaena and the other sacred plants. In San Christoval, Owa Raha and Owa Riki, so many associations between bonito fishing, Araha and stone-work were found that we reached the conclusion that the sacred bonito fishing and the

1) See IVENS 403 123 f, 114. 2) IVENS 403 109-124, COBRINGTON 160 48-50.

maraufu or malaohu ceremonies were brought by the Araha immigrants. In Saa and Ulawa, not only the same associations are found, but the traditions give us direct proof of these connections. The stone-using chiefly immigrants themselves performed the malaohu ceremonies, and their close association with bonito fishing is evident also from the fact that their names contain the word „seu“, „bonito“, or in some other way allude to the fishing of bonito. IVENS has in fact attributed the introduction of bonito fishing to these immigrants¹⁾. This constitutes a further proof of the identity of the Araha of San Christoval and the stone-using chiefly immigrants of Saa and Ulawa. There is still another important element in favour of the identity of these chiefly immigrants in even wider regions: Fox mentions that the war leaders of the Abarihu had prefixed to their names the word „sau“ which, according to him, corresponds to the chiefs' titles sau, hau, au, and whakahau of Polynesia. This prefix was also used for those who were connected with the ghost sharks, a conception which, as mentioned, is itself part of the Abarihu culture²⁾. In regard to this IVENS has remarked that „sau“ is nothing but the word for bonito „säu“ or „seu“³⁾ which also formed an element of the chiefs' names of Saa and Ulawa. In Lau (Malaita) the word for bonito is „hau“⁴⁾ which completely agrees with the chiefs' title „hau“ of Tonga, Tahiti and Hawai, and with the Maori word „hau“, „famous“⁵⁾.

It is further worth mentioning that it was one of the chiefly immigrants of Saa who was responsible for the planting of the coconut on a large scale. From this it does not naturally follow indeed that he also introduced the coconut, but one of his predecessors may have done so, although we have no record of this. But if it is borne in mind that in the New Hebrides the coconut is clearly shown to have been introduced by the stone-using immigrants, that in Santa Cruz it apparently goes back to a group of immigrants, and that in San Christoval the coconut is closely associated with the Atawa immigrants and with stone-work, this incident of the Saa myth cannot fail to be without significance. It is likewise remarkable that all those rites of Saa and Ulawa in which the coconut is used are connected with bonito fishing, and that the coconuts for sacred purposes were stored on the stone walls of the sacred canoe house, which, as mentioned, was itself associated with bonito fishing. It will be gathered from the following myth that also in Saa it was these stone-using immigrants who were the introducers of food plants: The canoe went out after bonito in their harbour, at Dei Matawa, but the shoal took them out a long way, right over the yam, and „He who looked for it“ played his bow hook which got caught in a piece of the yam. The yam was firmly rooted in the sand. „He that dived for it“ dived and broke a piece off. „He that introduced yams“ stayed in the canoe house and guarded it. He took a piece of the

1) 403 480. 2) Fox 263 359. 3) 403 480. 4) IVENS 409 111. 5) Fox 263 359.

yam by stealth and roasted it and found it was sweet. When the fishermen returned he told them of his discovery, and they, too, cooked a piece throwing away the peel. Now that piece of peel sprouted, and the yam spread all over the village. Then the people of the mainland heard that there was abundance of food at Dei Matawa, and their chief, Reach Matawa, told his people to go and get the yams. His brother, named "He of the twig of dracaena", took a fleet of big oversea canoes and went to Dei Matawa and they filled these with yams and went off. The chief, Reach Matawa, and his brother made gardens and planted the yams. Since the garden of "He of the twig of dracaena" produced more than that of his brother an estrangement was caused between them, and the elder brother took his canoes and went to all landing places of the east coast of Little Mala, and gave to all the people a basket of yams. The beings belonging to the yams are five in number: "He that looked for it", "He at the mouth of the stream", "He that dived for it", "He that introduced yams", and "Reach Matawa"¹). The following facts show that we are entitled to identify these introducers of the yam with the other stone-using immigrants: The chief's name "Reach Matawa" and the harbour name "Dei Matawa" indicate that they relate to immigrants; the name of the chief's brother "He of the twig of dracaena" shows the same association with the dracaena as the other chiefs' names mentioned in which the word dracaena formed an element, and "Reach Matawa" also is a chief. The characters of this myth go bonito fishing, and it is significant that it is the bonitos which lead to the discovery of the yams. "He that introduced yams" guards the canoe house, the association of which with bonito fishing and the stone-using immigrants we have observed repeatedly. It may further be asked whether the fishing up of the yams is not in some way reminiscent of the fishing up of an island on which food plants were often planted, a theme we have seen to form part of the mythology of the stone-using immigrants.

The Sea Spirits called Akalo ni matawa, i.e. Foreign Spirits or spirits from abroad whose home is thought to be in San Christoval, are worshipped in San Christoval, Owa Raha, Owa Riki, Saa, Ae'ulu and Ulawa. IVENS has pointed out that the distribution of their worship corresponds to that of the malaohu system and that there are numerous associations between the Sea Spirits and bonito fishing. Therefore he expresses the opinion that the Atawa and Araha introduced the worship of the Sea Spirits or were themselves worshipped as Sea Spirits by the aboriginal population²). This is borne out by the fact that representations and carvings of these Sea Spirits in wood are fastened over the apex of the canoe houses or the chiefly lodges as finials, and that they are represented as using bows and arrows. Now, although bows and arrows are still in use in Saa, they are

1) IVENS 403 442-444. 2) 403 199-205, 470-480.

not used to-day in Ulawa, and it is only from the Spanish records that we gather that the Ulawa people in 1568 employed bows and arrows¹). In these circumstances the following Ulawa myth is of great interest to us: The people of Ulawa once found a fish which they broiled. But it was not really a fish but Pua Tangalu, the highest of the Sea Spirits in Ulawa. Pua Tangalu said to them: "Plant me in the beach altar and you will see" (this is the stone circle previously mentioned). The people planted the fish and from the grave there grew a dracaena and a taro²). From this the close connection of the stone-using immigrants with the ritual use of the dracaena is again clearly evident. There is still another point which might be mentioned. Saa and Ulawa have two words for areca nut 'e'e and puo; "the former is the local name, the latter is an importation from Indonesia" as IVENS declares, therefore expressing the opinion that the name Pua Tangalu means "areca nut in abundance", although no other Sea Spirit has a name like it. Since most of their names show a connection with bonito fishing, IVENS concludes that there must be a connection between the "betel-people" and the immigrants who introduced bonito fishing³), or in other words between the betel-people and the megalithic immigrants. Although we do not intend here to discuss the problem of the "betel-people", it must, however, be emphasized that there is no evidence in the rest of Melanesia to support IVENS' view, and IVENS himself admits that his evidence is very weak. I am of opinion that the resemblance between the names Tangalu and Tangalua, the latter being a local version of Tangaloo, Tagaro, Taghar, Tahar, etc., is not only mere coincidence, but that both are in fact identical. This is borne out by the fact that Pua Tangalu as well as Tangalua are representatives of the stone-using immigrants, that the springing up of a plant from the skull or the body of the culture hero is recorded also in connection with Tangalua of Tanna (the plant in this case is the coconut palm) and Tangaroo of Aniwa (here the plants are the coconut and the sago palm), and that this theme was found to be characteristic of the stone-using immigrants in general.

We shall endeavour to establish what further elements of the Qat-Ambat-Tagaro mythology are found in the myths of Saa and Ulawa.

According to a Saa story three sky men were looking for a wife for one of them. When they peered down they saw Uheli memu and his wife Sau mamare i ta'alu. One of the sky men let down his net with twigs of *evodia* for the woman. When the woman saw the net and felt the effect of the *evodia* (the use of *evodia* in love magic has been mentioned before) she caught hold of the net and the sky men pulled her up, and one of the sky men married her. But her husband grieved over the loss of his wife. So he went to the man that owned the "areca nut that lengthens out" and paid him a fee. Then he commanded it, saying: "Areca nut lengthen

1) IVENS 403 41, 297 f, 340. 2) IVENS 403 203 ff. 3) 403 481.

out and reach the sky". It moved up till it pierced the sky, and Uheli memu went up to Lady Fan-alive. He was nearly dead with hunger and through the waves which were breaking on the beach. He was buried in the sand. Lady Fan-alive sent her two grandchildren, two girls, to the beach where they found him dead, but Lady Fan-alive fanned him back to life. Then the man took some leaves of dracaena, tied them together, and everyone in the sky went to sleep (for this use of the sacred plants in magic see earlier). Then he killed all the sky-people, and calling the areca nut, ordered it to go down again. And it went down with him and his wife and with the two girls and they returned home¹). In this myth which strongly resembles that of Maipua of San Christoval, the themes of the lengthening of the tree, the ascension to the sky and the marriage of the sky-women recur, themes whose association with the stone-using immigrants has frequently been found. Therefore the mention in this myth of the use in magic of dracaena and evodia is significant.

Still further points of agreement with the stories of the winged sky-women are contained in the following myth of Puungilalamoa which at the same time is but another version of the preceding story²). Puungilalamoa is a man who was borne by an eagle to the sky until his head caught in the aerial roots of a banyan. From these he descended and was in the sky. He came to a pool where Sau mamare i ta'alu was wont to bathe and there he met the woman. Her skin was mottled. Since he wished to become like her, she had him roasted in an oven, and he became mottled too. Later the sky-people let them both down to their earthen home on a long cane. When also his brother wanted to be as mottled as he was, he let him make an oven to roast him. When they roasted him the woman wanted to protect him with incantations, but he refused, and when they opened the oven he was all in little pieces.—This agrees with the story of the roasting of Warohunuga, the Qat of San Christoval, by his brothers and his rescue, and the killing of Warohunugaraiia in the same manner. The aerial roots of the banyan as vehicle into the sky have already been found to be a typical feature particularly in the stories of the sky-women. The bathing of the sky-woman occurs here again, with the sole difference that in this myth the bathing place is in the sky itself. Also the light skin of the sky-women or the culture heroes associated with them recurs once more.

A Saa tale relates the story of a pregnant widow who wanted to go with the people to a fish-market. As they went she began to be in labour, and the canoe she was in nearly sank by reason of the agony she was in. They summoned a very large canoe and she got into that; but it, too, nearly sank. And it was the same with all the fleet. Then they put her ashore and her child was born. As soon as the boy was born he spoke, ran along the beach, and waded out to sea, and his umbilical cord was twisted round his neck.

1) IVENS 403 280 f, 456-458. 2) IVENS 403 458-461, 475.

His mother gave him the name of "Born by the side of a bow". The boy cried for a bow and his mother made him a bow and he went shooting fish. Like Warohunuga—the Qat of San Christoval—this boy is swallowed by a big man-eating fish (*oligorus gigas*) from which he later came forth again. Like Warohunuga he, too, then kills a big man-eating pig, and finally a man-eating eagle thus exterminating all the man-eating animals¹). The sinking of the canoe through the woman who was pregnant agrees with the story of the sister of the ten (Qat) brothers of Santa Cruz in which this woman was unable to follow her brothers in their flight from the ogre, since with her "big foot" she causes all the canoes to sink. As soon as the boy of this woman was born he was able to speak like Qat of the Banks Islands and Warohunuga, the Qat of San Christoval. The hero of our present story again is an ogre slayer, and, this myth is really but a variant of the oft recurring myth of the killing of the ogre, Taso in Maevo, Tepkakhola in Santa Cruz and Semsem in Tanna, the connection of which with the Qat myths has already been shown; thus "Born by the side of the bow" is identical with Qat, or, at least, belongs to the same group as the Qat-Ambat heroes. It is therefore significant that he uses bow and arrows as weapons, and that even his very name expresses the association with these weapons.

Still stronger evidence of resemblance to Warohunuga and, accordingly also to the Qat-Ambat mythology, is revealed in the Saa myth of the "Delectable Lizard" which, without hesitation, can be considered as a Qat myth. Some of the themes of the "Born by the side of a bow" myth also occur here again. The home of this hero was at the foot of a rock, and he belonged to the chiefs of Roasi (that is, to the group of the stone-using immigrants). When his mother was delivered of him she called his name "The Delectable Lizard". The boy at once got up and ran outside wrapping his umbilical cord round his waist as "Born by the side of a bow", and like the latter, Qat, and Warohunuga, he was able to speak as soon as he was born. He ran to his father and came to the beach, where all the men were at work digging holes for the pillars for the canoe house. His father was much annoyed and said they were to bury him at the foot of the pillar. The others then summoned him to go down into the hole and scrape out the earth, and while he was doing this forty men lifted up the pillar and threw it on top of him. But he caught hold of the end of the pillar and lifted it up, and then jumped out.—This incident, it will be remembered, occurred in connection with Warohunuga of San Christoval, Qat of the Banks Islands, and Barkulkul of South Pentecost.—Like Warohunuga he was the first to cut notches on the tops of the pillars, so that the ridge pole did not slide off as it did, when the tops were cut square. He also performed other deeds. Then his father sent him to bathe

1) IVENS 403 432-436.

in the sea intending to deliver him over to the clam at the mouth of the harbour. The boy, finding a *morinda citrifolia* bush, scraped the roots and put the scrapings inside his armlet. Then he swam out, and when the clam closed upon him they all rejoiced and shouted with joy. Now, when he applied the scrapings the clam opened its mouth and the boy came out and taking up the clam he carried it ashore and threw it down in front of the canoe house, saying: "A fish for you to eat".—This theme we have encountered in connection with Ambat of Seniang, Kabat of Mewun, Mosig-sig of Santa Cruz, Warohunuga and Rapuanate of San Christoval, the only difference being that here the characters are not a group of brothers, but the father and a number of men.—Then they delivered him to a man-eating pig, but (as Warohunuga and "Born by the side of a bow") he killed it. They then went on a visit to Ulawa and told the boy to climb and get areca nuts. When he started to climb, the palm began to extend upwards and finally hit the sky, and there the boy stayed. The palm came back to earth without him, and they rejoiced and returned to Mala. But the boy ran along the sky and he bent a rainbow down and descended upon it, arriving before the others.—The theme of the lengthening of the tree has been found in connection with Uheli (Saa), Warohunuga (San Christoval), Qat (Banks Islands), in the myth of South Pentecost and in connection with Matiktiki of Tanna and Futuna. The bending of the rainbow is but a modification of the usual bending of the tree on which the descent is effected. The ascension to and the staying in the sky occur here again.—Then they took him for the groper (*oligorus gigas*) to eat. The groper swallowed him, but finally grounded and (like Warohunuga and "Born by the side of a bow") the boy came out again. They thereupon took the skin of an areca nut which he had eaten, and burnt it, and he died¹).

The theme of the fishing up of the island again appears in the Ulawa mythology. Tradition says that Ulawa was fished up out of the sea by a man from Mala. His name, according to Fox, is Mauwa, but he does not seem to be known as such in Ulawa, where he is spoken of as Poro wā'i henua, He who pulled up the land²).

Malaita: We are particularly well informed about this island through the excellent work of IVENS: *The Island Builders of the Pacific*. Racially the people in the coastal districts can be distinguished from the hill people (Tolo). The former seem to be the lightest skinned people of all the Solomon Islands. "Many of these are scarcely any darker than Polynesians, and have hair more often chestnut or straw-coloured than black"³). The hair is often wavy⁴). The Tolo people are a little shorter and darker⁵). IVENS has shown that the culture, language, and social organization of the

1) IVENS 403 436-440. 2) IVENS 403 2. 3) HOGGIN 377 234. 4) BUSCHAN 117 160, THURNWALD 881 106. 5) PARAVICINI 626 152, IVENS 403 20, 404 31 f.

whole island are relatively homogeneous, and that the peoples of the north, the south, and the centre resemble one another. The intimate connection of the central peoples with immigration legends is clear evidence of this uniformity of their culture¹). Trading relations exist not only between the coastal people and the hill people, but also with Guadalcanar, Florida, Isabel, Saa, Ulawa, and San Christoval²).

On the northern coast of Big Mala there is a coral reef extending for over twenty miles from Cape Manu to the natural island called Ngwalulu. Inside this reef there are thirty-three islands of varied sizes composed of blocks of coral which have been built up in shallow spots by the hand of man. These artificial islands have been described by many observers. The people who inhabit them call themselves Too i asi (Sea people), in contradistinction to the people of the hills, whom they call Too i tolo (Hill people). The further name, Lau, is applied both to the islands and also to the language spoken by the people. This word Lau denotes "northward", and is the same as the lau of Fiji. The primary meaning of the word is "seaward", Malay laut. The peoples of the two islands in Port Adam, Little Mala, are migrants from Ataa Cove. There are other artificial islands at Sio Harbour, at the north-west end of the island, at Suu on the north coast, Alite, Auke and Langalanga on the west coast, the inhabitants of which also use the word Asi of themselves and Tolo of the hill peoples. The artificial islands stand fairly near to the coast of the mainland, and it is possible to wade out to them at low spring-tides. Two different kinds of artificial islands can be distinguished, those which are built round a solid core, generally a raised patch of coral upon the reef, and the others without any natural core which have been built up entirely artificially from the ground. The stones chosen for building are pieces of coral rock. After the actual rock work of an island is completed, the floor of it is covered with broken coral and sand, which is carried in canoes to the building ground. The islands are all built up to a height sufficient to keep out high spring-tides, and are faced with a wall of coral stones about six to eight feet high, with here and there an opening for the admission of the canoes of the men and the women separately³).

All the accounts state that the founder of the artificial island Sulu Vou in the Lau Group, was a man named Leo, who, with his four sons began to build the island. The surrounding artificial islands are known to have been built by chiefs who were direct descendants of Leo. At the time of the building, Leo was said to be living at Funaa Vou, an artificial island a few miles north. The founding of Funaa Vou must therefore have pre-

1) IVENS 404 19, 27, 296, HOGGIN 379 257. 2) HOGGIN 377 243, 259, 389 291, IVENS 403 27 f, 404 28-30, 33 f, 141, 166, 184 ff, 226 f, 276, 409 12, PARAVICINI 626 150, 153, 160.
3) IVENS 404 20 f, 26, 48 f, 51 f, 192 f, fig. p. 62, 184, 192, 240, 409 33 f, HOGGIN 377 253, 389 291, HOPKINS 396 152 f, COOMBE 170 268 f, 272-274, 281, Pl. p. 268, 281, RAUCAZ 690 242, Pl. p. 235, RANNIE 684 58, FESTETICS DE TOLNA 234 311 f, PARAVICINI 626 156, 158, SHURCLIFF 782 177 f, fig. p. 176, WOODFORD 979 16 f, 980 81.

ceded that of Sulu Vou. This is actually the case and is proved by the greater number of generations of Funaa Vou. Leo travelled as far south as Manu eu bartering his fish. His own home was at Ngwalo on the south coast of Ngwalulu Island. All the traditions are perfectly clear as to this point, which is confirmed by the fact that the skulls of the Sulu Vou people are taken, after death, to Ngwalo, and put into a graveyard there. This, as IVENS has pointed out, is a sure proof of the origin of the people, and a similar feature will be found in connection with other artificial islands and the place of origin of their founders. Moreover, the Sulu Vou chiefs still own and use certain fishing grounds off Ngwalo. Leo's family hailed originally from Suu in the north, which is an artificial island also. The greater number of generations show it to be older still than Funaa Vou and Sulu Vou. Funaa Vou is said to have been founded by two men, Radu of Manu asi, and Odu of Baaleo, two villages on the foothills near by. There is good evidence of a very close connection between Funaa Vou and Asi ni ngwane, Ataa Cove. Just as Sulu Vou takes the skulls of its dead periodically to Ngwalo, so Funaa Vou takes its skulls to Asi ni ngwane. Fuaga is an island in Ataa Cove. From the number of generations in the genealogies, it appears that Fuaga was founded at a date considerably earlier than Funaa Vou.

From the genealogies of their main chief, the people of Auke on the west coast were ahead even of Fuaga in the time of the foundation of their island. If IVENS is right in his argument, viz. that the order of seniority among the artificial islands can be determined by the lists of their main chiefs, Auke is the oldest of them all. From these data, it is evident that the founders of Funaa Vou were hill-men, and, as IVENS has pointed out, this also was the case with the founders of Fuaga. Leo's ancestors came from Suu as probably did the first man to settle on Ngwalulu. In view of the character of their language, IVENS has shown that the Suu people also originally belonged to the hills above their present harbour. Later they all descended, so that IVENS has reached the general conclusion that "The Lau people were all hill people at some time in the past"¹). It will be seen later that the white-skinned stone-using immigrants (Read Head), after their landing near Fiu, went into the interior of the country. We must therefore conclude that it was these stone-using immigrants who later redescended to the coast and erected the artificial islands. Furthermore, if Auke is the oldest of the artificial islands, it is to be expected that its constructors first arrived at a place near it. Now, Auke is actually situated near Fiu, the place where the stone-using immigrants (Red Head) landed on their arrival. This is further support for the view that it was these stone-using immigrants who erected the artificial islands, and to whom Read Head also belonged.

1) 404 48-70, 249 f.

Many writers have expressed the opinion that the artificial islands were built as a place of refuge from attacks by the hill people ¹⁾. PARAVICINI applies this opinion even to Alite Island, where two villages are built on one island separated from each other by a high stone wall, "since the inhabitants of these two villages live in grim hostility" ²⁾. Also the older Admiralty charts speak of "fortified islands" ³⁾. This opinion has been rejected by IVENS, who maintains that "the peoples of the islands, previous to the importation of firearms, lived in a state of comparative peace with their neighbours of the hills" ⁴⁾. Also the fact that the islands are built so near the coast that it is possible to wade out to them at low tide, is inconsistent with the opinion that they were intended as a refuge. One of the myths relates, in fact, that Leo was requested by O'ona—whom IVENS has shown to be certainly an immigrant of the interior—to build the island Sulu Vou, since O'ona wished to have somebody in his vicinity who could procure him fish, and the immigrant Bora i Gao who introduced food plants in Mala (see later) "asked his son to make him an artificial island in the sea, so that he might go and die there" ⁵⁾. Also the supposition of RIVERS that the islands were built to escape from the mosquitoes of the foreshore is rejected by IVENS who says ⁶⁾ that "the people themselves have no tradition of fleeing from enemies of any sort, human or otherwise, and of taking up their present location for safety's sake".

The following kinds of stone-work are found on the artificial islands. On Auke Island there are two settlements "divided on either side by walls of coral stone six feet in height" ⁷⁾. As has already been mentioned there are two settlements on Alite Island divided from each other by a high stone wall. A small hole left in the wall serves for communication ⁸⁾. COOMBE without indicating its name mentions a village, which "was divided into a series of fenced enclosures, each having, say, four or five houses and its own chief" ⁹⁾. The bisi, the quarter set apart for women during their monthly periods, containing two or three huts only, is shut off on its inner side by a wall of stones. The outer wall of the islands enclose the bae, the cemetery into which the bones of the dead are thrown after their exhumation. The bae on its landward side also has a fence of stones terminating and enclosing the club house (beu), so that the cemetery and the club house form one sacred place. There is generally a big *baringtonia* tree growing in the bae, as well as red *dracaenas*, *crotons*, *coleus*, *evodia*

1) This view is held by PARAVICINI 626 158, RAUCAZ 690 242, FESTETICS DE TOLNA 234 311 f, RANNIE 684 58, COOMBE 170 268 f, 272 f, 281. 2) PARAVICINI 626 158. 3) IVENS 404 53; PARAVICINI further mentions a small island in the lagoon not far from Rohinari upon which lived a chief who had erected walls to protect his island against attacks (626 167), but this is probably a natural coral island, since, as far as I can see, other sources of information do not mention an artificial island so far to the south. 4) 404 54, see also 190 f. 5) IVENS 404 56, 293. 6) 404 55. 7) WOODFORD 980 81. 8) PARAVICINI 626 158. 9) 170 283.

and two shrubs called haolo and 'ai ni, "all of which are planted for set purpose" ¹⁾).

The terms used to denote altars in Lau are: lasi, gwou lumu or gwai lumu, bae and fafaraa. A general term which covers all these is fulii ere (place of fire) ²⁾. The altars "lasi" are situated outside and in front of the club house. The altars were composed of the hard rocks which are ordinarily used for cooking. The rocks are set in a circle, and care is taken to pile them up when they are not in use. The altars "gwou lumu", are inside the club house. The "bae", as has already been mentioned, is the section of the island into which the bones of the dead are cast. A bae in Lau is the equivalent of the pirupiru of Saa, Ulawa and San Christoval where the bones of the dead were placed and where sacrifice was carried out. The use of the word bae in connection with the shark altars on the mainland proves, as IVENS points out, that sacrifices were made originally in the places where the bones of the dead were placed, as was also the case in the pirupiru of Saa, Ulawa and San Christoval, although the bae are not stone circles. The altars fafaraa are used for the offerings of first fruits and are situated inside a chief's club house. Pigs may also be offered there after the soul of the dead has been fished for and caught. Some fafaraa are situated in the open in the women's quarters, marking the spot where some important person dropped dead or where he died ³⁾. Such a fafaraa at Fera subua is shown by IVENS ⁴⁾. By the side of this altar for first fruits, a big stone is set up on end, menhir-like, but the photo is not very distinct, and IVENS does not record any details regarding it. A similar description is, however, given by PARAVICINI regarding the inland region of Buma (Langalanga Lagoon). He says: "Under an old tree we found an oblong limestone set up on end... Long ago a man had fallen to the ground dead at that place" ⁵⁾. This connection of a menhir-like stone with the dead is of interest, but we are not told whether this stone was held to be the seat or the embodiment of the spirit of the dead. IVENS records that there is a row of stones in a certain place among the Bae Guu people, a Tolo tribe of the north, which are said to be petrified men, and these stones are spoken of as agalo (ghost) ⁶⁾; but unfortunately he does not give more detailed information and says nothing about the size of these stones or whether they were worked or not. Their connection with the dead is clear, however, and perhaps these stones are, in fact, menhirs. The fact that they were found in the interior of the island does not exclude the possibility of their having been erected by the stone-using immigrants, since, as has already been mentioned, the stone-using immigrants after their arrival in the country penetrated into the hills inland and did not descend to the coast until much later. At Sulu Vou, there is an altar site in front

1) IVENS 404 61, 65, 207 f, fig. p. 62. 2) IVENS 404 153, 409 31, 43, 66, 109, HOPKINS 396 152, COOMBE 170 280. 3) IVENS 404 66, 153 f, fig. p. 62, Pl. p. 152. 4) 404 272. 5) 626 163. 6) 404 133.

of the club house marked by a big flint stone set up on end. Sacrifices to Sina Kwao may be made on this site ¹⁾).

The general term for sacrifice in Lau is naare boso, or nakaso boso, naar or nakasi meaning roasting, and boso meaning pig. Apart from the sacrificial roasting of pig's flesh there is no eating of pork by the peoples of North Mala ²⁾).

Besides the shark worship in the bae of the shore, some of the artificial islands have shark altars on them which are also called bae, or bae'ana baekwa, the bae belonging to the sharks ³⁾. The worship of sharks is practised amongst all the coastal peoples of North Mala, from Uru and Ngongosila on the east coast, to Auke and Langalanga in the west. The sharks are considered to be the incarnations of ancestors ⁴⁾. The fact that the distribution of the shark cult in Malaita agrees with the distribution of the artificial islands confirms our conclusion that in Saa, Ulawa, and San Christoval the shark cult is attributable to the culture of the stone-using immigrants. This is further supported by the fact that the offering of sacrifices to the sharks at the megalithic bae corresponds completely to what was also found in Saa, Ulawa, and San Christoval ⁵⁾).

As has already been mentioned, the skulls of the dead of Sulu Vou are carried periodically to Ngwalulu Island, and those of Fumaa Vou to Asini ngwane in Ataa Cove. On both places there are enclosures of coral rock in which the skulls are deposited ⁶⁾. In his vocabulary IVENS mentions: "dedea, a stone enclosure for skulls of relatives" ⁷⁾. PARAVICINI ⁸⁾ gives the following information about Baunani (on the western coast, north of Suu): "Near to the coast there are in the forest a few burial places, two circular stone walls about 7 feet in diameter. In the centre of each a post is set up which bears a skull". Whether by this an enclosure analogous to that of Ngwalulu Island and Ataa Cove is meant is not clear from this description.

Discussing the heo graves of San Christoval, FOX ⁹⁾ says: "A man from South-east Malaita told me that the heo are there called tete, and are of stone on the coast and earth in the interior, as with us. Some, he said, are very lofty, and in some are elaborate stone-work". IVENS makes no mention of this or similar kinds of stone graves, and it is probable that FOX was mistaken. Moreover, on Saa and Ulawa heo-like monuments are not known, as far as I can see. We have mentioned that, in Saa, the bones of important people were thrown into the pirupiru which is called te'ete'e in the interior

1) IVENS 404 154. 2) IVENS 404 155. 3) This word baekwa meaning shark corresponds to the pa'ewa of Saa and Ulawa, and the pagewa of San Christoval, Owa Raha and Owa Riki. 4) IVENS 404 158, 162. Regarding the association of ghost sharks on Malaita and the stone-using immigrants see also IVENS 404 56, 132 f, 149, COOMBE 170 287 f, HOGGIN 377 261. 5) See also the record of the mythological character O'ona of Manu, IVENS 404 56 ff, 164 f, who is represented as a shark priest, and whose close connection with Leo we have mentioned. 6) IVENS 404 208 f. 7) 409 23. 8) 626 17 Pl. 70. 9) 263 218 Note 1.

of Saa. Is it not possible that the "tete" of Fox's informant of South-east Malaita might be identical with the "te'ete'e" of Saa? In view of the cultural similarity between Saa and South Malaita, the same thing could quite possibly have been found in both regions. If this be true, Fox's informant may simply have had in mind the fact that the heo and the "tete" are similar in function, since both are burial places. But Fox's "tete" of South-east Malaita and the "te'ete'e" of Saa might also be identified with the "dedea" of Ngwalulu Island and Ataa Cove, which are also stone enclosures and in which the skulls were put, as they were into the stone circles pirupiru of Saa, Ulawa and San Christoval.

In the hills of Malaita a double ring of trunks of trees with a trench outside the whole are erected for defence purposes¹⁾, and corresponds to the war ditches we have encountered on San Christoval.

Stories told in North Malaita of the "People of Morodo" correspond exactly to the stories of the Masi in Ulawa and San Christoval²⁾. Every story does but expose their foolishness. The home of these people was on the Morodo ridge, from which they take their name. The sites of their villages are not difficult to locate owing to their having dug a fosse round their club houses which are said to have been built of mud. These fosses still form to-day a distinctive landmark. Another surviving trace of this people is a pig carved in stone. The pig is said to have been caught at sea by Sikwa ii'a and carried to its present site. This pig can be compared with the stone carving of a pig at Ulawa, where it is attributed to the Masi. IVENS records that he heard stories about worked stones found on the hills above Bit'a'ama Harbour, in the northern part of the island, but he does not give any details. He expresses the opinion that the fact "that the man Sikwa ii'a is said to have caught the Morodo pig at sea may perhaps refer to an art of stone-working which was introduced from abroad" and I should like to add, to the fact that the pig was introduced from abroad too, two conclusions which confirm the results previously obtained in the course of this study. The mention that the club house of Morodo was built of mud was considered by IVENS as "a reference to the use of bricks for building by the people of Morodo". In the erection of a small stone house by the Araha boys of San Christoval during their initiation into bonito fishing we have seen a reminiscence of the building of stone houses by the stone-using immigrants, and bonito fishing was itself found to have been introduced by the stone-using immigrants. Moreover, the actual use of stones for the building of certain houses has been repeatedly found in the neighbouring islands. It has further been seen that the analogous Masi of Ulawa and San Christoval were the slaves of the stone-using immigrants and executed their stone-works, and this must also be true for the "People of Morodo". But here again, the stone-work itself must belong to the culture of the stone-using chiefly immigrants. I should further like

1) IVENS 404 53. 2) IVENS 404 286-288.

to add that a man's house photographed by HOGGIN¹⁾ in Malaita seems to be erected upon a low stone foundation, whereas the women's houses are built directly on the ground. But neither HOGGIN nor any other writer says anything about stone foundations.

Sacred Plants. In addition to the data already given it may be mentioned that in the Lau Islands certain things are considered in themselves to be possessed of magical power, and are used as charms. These charms are the leaves of dracaena, coleus and the leaves of certain evodias. Dracaena is thrown at a person in order to cause sickness; the green-leaved dracaena used in magic is called dili or didili, and it is very significant that "dili" also means "to be affected by magic". The red dracaena planted in the bae is called "hango"; red dracaena is used in dancing, and sprigs of it are held in the dancers' hands; together with the croton it serves to bar the way against enemies; the green dracaena is used in divination by the shark priests in order to ascertain the whereabouts of a wanted crocodile or shark. Red dracaena leaves are further used in weather magic, and in a divination performed in order to discover a thief or a murderer. After the offering of sacrifices, and after a mortuary feast, the priest and his assistants purge themselves by ceremonial bathing, after which they strike themselves with pieces of red dracaena; when a garden is being prepared the ordinary protective measures against theft, or blasting influences, or the attack of "wild" ghosts, consists of pieces of red dracaena set up at the corners of the garden. A new club house is dedicated by the priest by placing green-leaved dracaenas over the front and rear of the main ridge-pole, and also over the doorway. At Sulu Vou, when the skulls of the dead are being removed to Ngwalo, the priest hands out the skulls to his assistants who hold a sprig of dracaena in their hands. Men who wish to ward off attacks by sharks, crocodiles, etc. will bathe and strike their bodies with pieces of croton. The coleus (haufi) is known in Lau and Tolo as "hide in black magic" and is used in black magic. Dancers stick the yellow-leaved evodia in their belts. When the Langelanga people hold a feast, they bring out the skulls of the dead from the club houses, and, inserting evodia into the nostrils, they place the skulls round the dancers to watch the dance. Apart from the word "rii" for evodia, which appears in the name "Suuna rii", "Harbour of Evodia", the evodia variety which is planted in the bae is called "fuaka"; another evodia is called "konare", and sprays of it are stuck in the armlet, and yet another variety of the evodia is called "kokona"²⁾. I am not aware of the ritual use of the casuarina (salu)³⁾, but it is worth mentioning that the myth dealing with a casuarina of the Kwara'ae people shows remarkable similarity to the myth of the introduction of the casuarina by the Tongans in Polynesia⁴⁾.

1) 389 Pl. III A. 2) IVENS 404 114, 118, 138 f, 160, 163, 190, 195, 211, 213, 216 f, 221 f, 224 f, 227, 236 f, 239, 274, 409 24, 37, 46, 48, 56, 106, 112. 3) IVENS 404 179, 409 91, 112. 4) Cf. IVENS 404 179 ff, and GILL 285 81 ff, 274.

Mythological evidence. Native traditions tell of the arrival on Malaita of foreigners who came in outrigger canoes, who coasted at the north end or west coast of the island, and then went into the hill country of the interior, who wore clothes, whose skin was white and who wore a covering on their hair which was red. One of these immigrants, Gwau Meo (Red Head) landed at the stream called "The Water of Kela" or "The Chief's Mortar", which is situated near the village of Fiu on the western coast. He had one son with him and a company of followers. After landing he pushed on up into the hills, saying that he was unwilling to see Florida and Isabel Island. The man had red hair and wore clothes¹). He brought a turtle with him, and he put it into a pool which to-day is very sacred. Red-Head wore a covering over his head, and never allowed his hair to be seen. At the time when Gwau meo landed there were no people on Malaita. The story of this immigrant is common to Faateia, Kwara'Ae, Tali kali, and To'oa baita peoples²), that is the hill peoples into whose country Red Head must have ascended, and Areare. The mention that Red Head went into the hills after his landing, since he was unwilling to see Florida and Isabel, certainly reminds one of the migrations of Hatuibwari of San Christoval who also passed through many places leaving them again and again, since from them she could still see her former home, which she no longer wished to see, and who finally went to S.E. Guadalcanar. The mention of Florida and Isabel, in connection with Red Head, makes it therefore probable that these two islands were actually halting-places in the wanderings of Red Head. This assumption is in fact borne out by other reasons, as we shall see later.

The artificial island, Sulu Vou, possesses a relic, a bow, which is said to have belonged to the war ghost (agalimae) named Sina Kwao. It is kept in a special club house belonging to the priest who serves Sina Kwao. Funaa Vou Island has the war bow of an agalimae which once belonged to the Tolo village Gano Mela, and Fuaga Island still retains the coir noose with which Sina Kwao strangled people. Sina Kwao was the son of an aboriginal man by an immigrant woman, who with her brother landed on the east coast of North Malaita. His mother's name was Bira'ana hato (Cleave to the sun), his mother's brother was named Fai Lau, and his father Ngidu i boso (Pig's snout) who belonged to the Tali Kali mountain people. Bira'ana hato and her brother are said to have come from Suuna rii, i.e. "Harbour of Evodia" (suu, harbour, and rii, evodia), a place over-

1) With regard to the hair of these immigrants, IVENS makes the following remark (404 143 f): "One hears of read-headed persons being found amongst native peoples in various parts of the Pacific. The Maoris of New Zealand have a proverb: "Red hair, chief's hair", and red hair is still found to-day in certain chief families amongst the Maoris"; and he expresses the opinion that "the liming of hair by the Solomon Islanders in order to produce an orange tint seems to be a reminiscence of the presence among them in the past of a red-headed chief-people." (404 301). 2) IVENS 404 291 f, 406 34.

seas, and to have landed near Fuaga, in Ataa Cove. Thence they appear to have gone up into the interior, for Fai Lau is reported to have lived amongst the Fata Leka people. He was armed with a V-shaped crook as a weapon, and used it to catch men by the neck and kill them. Sina Kwao's name means "Shining White" (sina, shine, kwao, white) and it is said to have been given him in remembrance of his mother's brother. The native informant said that Sina Kwao was partly light-coloured and partly black. Sulu Vou Island has a second relic of Sina Kwao, a lock of his hair, and this hair is red in colour, red naturally and not limed. Sina Kwao is credited with killing a giant monitor lizard which was devouring the land; also with shooting an eagle and a dog which were eating the people. Furthermore he is credited with carrying a clam-shell ashore under his arm. The shell was to serve as his drinking-vessel, when the rain filled it. Sina Kwao carried on a fight with another agalimae called Toli. The father of Toli was named Niu (Coconut). Toli is said to have carried up to the hill country the other half of the clam shell which Sina Kwao used as a drinking vessel, whereupon Sina Kwao jabbed him with a war arrow barbed with human bone and smashed his head with a club. He then cut his head off and took it home to his club house in which there were a number of heads of his victims. Sina Kwao is said to have eaten the bodies of his victims. Like Red Head, he did not allow anyone to see his red hair. On his head he wore a covering made of bark. There are a number of other war ghosts (agalimae) who are worshipped. North Malaita has a set of songs celebrating the prowess of the agalimae. These songs are called "The source, or, the beginning of war". This phrase, the very name agalimae (war ghosts), and their possession of offensive weapons, according to IVENS, connects these immigrants with the introduction of war into North Malaita. The immigrants landing in their outrigger canoes at the east coast of North Malaita left at various places magical stones (fou) and the accompanying invocations by means of which porpoises and bonito could be caught. The hunting of porpoises is a practice of the Lau and Suu peoples, and also of the peoples of Auke and Langalanga (that is of those regions in which the artificial islands were found to exist). The immigrants are also said to have dropped a magic stone for bonito opposite Tae, near Sulu Vou. The hunting of porpoises by the coastal peoples of Malaita is surrounded with religious practices. It is undertaken in connection with the death-feast of a chief. In Lau, the company setting out for the catch is known as "the sacred company", and, in many ways, the rites connected with it bear a strong resemblance to those pertaining to the malaohu boys of Saa, Ulawa and San Christoval. The ghosts associated with porpoise-hunting are Leo, the founder of the artificial island Sulu Vou, Sina Kwao, and others¹).

1) IVENS 404 42, 141-147, 167, 169 f, 172, 223, 300, 302, 409 93, 96, 98.

The identity of these light-skinned chiefly immigrants (chiefs are called here Aarai¹) evidently corresponding to the Araha and the Alaha of the other Solomon Islands) with our light-skinned stone-using immigrants is obvious. Not only are the migrations of Red Head strongly reminiscent of the migrations of the megalithic Hatuibwari, but the stories of the killing of the man-eating lizard and the man-eating eagle and dog by Sina Kwao, equate this hero with the Saa hero "Born by the side of a bow" whose identity with Warohunuga of San Christoval has been shown. We have made it clear that Warohunuga is none other than Qat of San Christoval and this not only equates "Born by the side of a bow", but also Sina Kwao with Qat. This is borne out by the familiar story of the clam shell related in connection with Sina Kwao which equates him with Ambat and Kabat of Malekula, Mosigsig of Santa Cruz, Warohunuga, the Qat of San Christoval, the widely known Rapuanate and the "Delectable Lizard" of Saa, i.e. with the representatives of our stone-using immigrants. Also the close connection of the clam shell with the Araha has already been pointed out. The introduction by these immigrants of bonito fishing and its magic and of the malaohu-like ceremonies associated with the ceremonial turtle fishing, shows clearly their identity with the stone-using immigrants of San Christoval, Owa Raha, Owa Riki, Saa and Ulawa, and it is significant that according to the myths, the "People of Morodo" who correspond to the Masi of San Christoval and Ulawa do not know bonito fishing²). Like the analogous chiefly immigrants of Little Mala, they chose the hills of the interior for their dwelling places and only later descended to the coast, becoming chiefs wherever they settled³). In his opinion that these immigrants are the introducers of war, IVENS apparently follows PERRY's reasoning, who, as is well known, attributed the introduction of war to his stone-using immigrants⁴). But the existing information regarding Melanesia contains very little in favour of this opinion. The question will, however, not be discussed at length here. For us it is of interest that bow and arrow appear once more as the weapons of these stone-using immigrants, and IVENS has emphasized that there are good reasons for attributing to these immigrants the introduction of the bow into Northern Malaita⁵). This again equates these immigrants with the other stone-using immigrants of Melanesia who, as we have seen on so many occasions, use bow and arrow as their weapons: thus Qat of the Banks Islands had bow and arrows, as had also Tagaro's son in Pentecost and Ambat of Seniang. The two sons of Kabat of Mewun shot their father with arrows; the weapons of the Araha of San Christoval were bow and arrow; the brothers of Rapuanate known in San Christoval, Saa, Ulawa, Ugi, and the Three Sisters Islands fought with bows, the Qat of Saa also uses bow and arrows and is even named "Born by the side of a bow", and also the Sea

1) IVENS 404 38 f. 2) IVENS 404 286-288. 3) IVENS 404 304 f. 4) 651 119.

5) 404 182-184.

Spirits known in San Christoval, Owa Raha, Owa Riki, Saa, Ae'ulu and Ulawa used bow and arrow as weapons. There is no story associating the stone-using immigrants of Malaita with the sky, but there is a tradition among the Bae Guu people of Northern Mala "that the bow originally fell from the sky"¹); since the bow belongs to the culture of the stone-using immigrants, we have here a clear indication of the association of the stone-using immigrants of Malaita with the sky. That the conception of the sky is in fact not foreign to the mythology of Malaita, is evident from the story of Vulcanangela who was swallowed by a fish while trying to catch it, and was carried inside the fish until it grounded, when he cut his way out by a flint stone. The story further relates that he travelled with the sun till he reached the house of the sun. Here he remained some time and was then lowered to earth again carrying with him the gift of fire²). So, besides the familiar theme of the swallowing by a fish, we have here again the theme of the ascension into the sky (here to the sun) and the later descent. With regard to the keeping of turtles in a pool, as related of Red Head, IVENS makes the very important remark that the name of the San Christoval hero Warohunugaraiia means "Warohunuga keep tame fish". This resemblance is of the utmost importance, since we have seen that Warohunugaraiia was the elder brother of Warohunugamwanchaora whom we have identified as the Qat of San Christoval; and it will further be remembered that Tagaro of Maevo also had a stone pool for fishes from which the sea originated and the many other similar stories of the origin of the sea all showed association with the stone-using culture heroes.

In North Malaita IVENS³) records the story of eight brothers, who are presumably immigrants, since they settled in the northern part of the hills which is clearly connected with the stories of immigrations. The number eight is used all over Malaita for an indefinite number, or to express totality. These eight brothers all spoke one language, but when they began to fight and quarrel, their language changed. They then separated, one going to Saa, one to Lau, one to Kwara'ae, etc. and the people of Mala are descended from them.—From this it is not clear whether in this myth there are any elements of the myth of the Qat-Ambat brothers.

The story of two children who were caught by a man-eating woman, agrees with the story of "Muumu, the ogre, and the two brothers" of Saa⁴), but shows no further similarities with the ogre myths of the Qat-Ambat brothers. The manner of killing the ogre by pulling him up a big tree and letting him drop is reminiscent of the ogre version of Tanna, Futuna, Aniwa and Polynesia.

In the discussion on San Christoval we have set forth the reasons for attributing the figona cult to the culture of the stone-using immigrants Araha. This view is strongly confirmed by the fact that the story of a

1) IVENS 404 182. 2) COOMBE 170 291. 3) 404 292, 299. 4) See IVENS 404 294 f and 403 416, 418.

figona snake called Walutahanga is known in South Malaita and Ulawa. This story, with the exception of minor insignificant differences, agrees very closely with the story of Hatuibwari¹). After the pieces into which the snake had been cut had united again, the snake wanders to Malapa (Marau Sound, South Guadalcanar) and to two places in Florida. But like Hatuibwari and the immigrant Red Head, since from each of these places she can still see her ancient home, she left, so that she might not be able to see it any longer. At all the places where the snake landed, a pirupiru was founded. The landing places where the pirupiru is still found to-day are Qaeralo at Malapa and Lumu in Florida. In Florida the snake devoured people and so was cut to pieces again by them, but the pieces reunited. A woman and a child of Florida had spared the snake, so it caused coconuts, yams, and taro to grow and also gave them pigs. Then the snake left Florida and went to Langalanga (that is, not far from the place where Red Head landed), where it was well received and has been worshipped by the people ever since.

This clear connection of the figona snake with the pirupiru is further proof that the figona cult forms part of the culture of the stone-using immigrants. Like the many other stone-using immigrants who also appeared in the form of snakes or were associated with snakes, this figona serpent introduces numerous kinds of food plants, particularly coconuts, and also pigs. Further interest in this myth lies in the fact that the figona cult, and accordingly its megalithic representatives are shown to migrate to the north of Malaita via Guadalcanar and Florida, a migration which is borne out by the actual stone-work and others traces left in these regions by the megalithic culture. Since South-east Guadalcanar is the country of the Araha ghosts, it is the more significant that the figona Walutahanga also came to this region and founded a megalithic pirupiru. A further indication that South-east Guadalcanar, Florida and Langalanga were halting-places in the migrations of the same stone-using immigrants is given by the fact that the place somewhat north of Langalanga, where Red Head landed, has the alternative name of "Kela Kwai", "The Water of Kela", that the island Florida by its native name is called "Nggela" ("Kela" by the Malaita people), and that also the south end of Guadalcanar is called "Kela". The ghosts of Florida Island also go to Malapa, near this Kela²). These connections will become increasingly clear in the following discussion on Florida and Guadalcanar.

IVENS has pointed out that the landing place of Red Head on Mala bears the alternative name "The Chief's Mortar", and the significance of this is enhanced by the fact that there is an analogous story in Ulawa in which mention is made of a mortar belonging to a chief who had migrated there from Mala. The place where the chief's mortar was taken ashore

1) See FOX 263 93-98. 2) IVENS 404 299 f.

at Ulawa became sacred¹⁾. Although it is not indicated clearly in the stories whether a wooden or stone mortar is meant, IVENS says: "I am inclined to think that the mortars were stone mortars, and bear witness to a knowledge of stone working... on the part of the immigrants". In the discussion on the New Hebrides, we have already given the reasons for attributing stone mortars to the culture of the stone-using immigrants. Bearing this in mind, it seems very probable that IVENS' conjecture is substantiated. And the fact that the mortars in Ulawa and Malaita are the property of a chief who, according to the Malaita story, was light-skinned, not only tallies with the fact that all the other stone-using immigrants, including Ambat the other proprietor of a stone mortar, were light-skinned, but also with the fact that they were chiefs.

According to a Tolo story, food plants were introduced by a man named Bora i Gao who also came from Suuna rii and settled on the hills in North Malaita. His son's name was 'Ota li gia. When the father was dying he asked his son to make him an artificial island in the sea, so that he might go and die there. When the island was finished he was carried down and left there alone. The son was not to come near the island for six days. When he returned he found strange plants growing from his father's body, areca palms, coconut trees, bananas, sago palms, betel pepper. He took the fruit and the plants and distributed them among the people of the hills²⁾. The introduction of food plants, and particularly of the coconut, was found to be one of the most characteristic features of the stone-using immigrants and the springing of the food plants from the body of Bora i Gao agrees with the springing of the coconut from the head or the dead body of the stone-using culture heroes already so frequently encountered. That Bora i Gao was actually a stone-using immigrant is furthermore confirmed by the fact that he, like Sina Kwao's mother and mother's brother, came from Suuna rii. That he ordered his son to make an artificial island, is direct proof that it is the stone-using immigrants who are responsible for the building of these islands. A further indication in favour of the opinion that the coconut was introduced by the stone-using immigrants is furnished by the fact that the father of the agalimae Toli with whom Sina Kwao fought was named "Niu", "coconut", and that, according to the South Malaita and Ulawa myth, the megalithic figona snake Walutahanga during its sojourn on Florida caused the coconut to grow³⁾.

There is no direct mythological proof for the introduction of the pig by the stone-using immigrants in Malaita. It is, however, significant that with the exception of sacrificial offering of pigs to the ghosts on various occasions, and the eating at feasts which are all connected with the newly dead, the people of North Malaita do not eat pork⁴⁾; and we have

1) IVENS 404 300. 2) IVENS 404 293. 3) See, however, also IVENS 404 247, 250.
4) IVENS 404 99, 115, 155 f, 209.

repeatedly seen that a very highly developed cult of the dead is a very characteristic feature of the culture of the stone-using immigrants. IVENS identifies the North-Mala word for pig "boso", and Saa and Ulawa "poo", with the Malayan word "babi" for pig, and thinks we are "justified in assuming that pigs were introduced into Mala by immigrant chiefs from Indonesia" ¹⁾. We shall touch upon this question again later on. A direct proof of the introduction of the pig into Florida by the stone-using immigrants is furnished by the Walutahanga myth, since this megalithic figona was said to have given pigs to the people.

The fact that the light-skinned stone-using immigrants (Sina Kwao's mother and mother's brother, as well as the culture hero Bora i Gao) originally came from "Harbour of Evodia" ²⁾ is a further direct proof of the connection of the stone-using immigrants with these sacred plants, a connection for which we have found such abundant confirmation. We do not know where this "Evodia Harbour" is situated, but the arrival of these immigrants who came into North Malaita was certainly via the south end of Isabel, for the ghosts of North Mala go either to Momolu, an island at the south-west end of Isabel (and also the home of the dead of Isabel), or to Ramos Island which lies midway between Malaita and Isabel ³⁾. Also the "salutation" of the banana ⁴⁾ attributes its introduction into Malaita to Momolu people; and the name of the reputed introducer of food plants into Malaita, Bora i Gao, connects him with Gao, Isabel Island ⁵⁾. No definite information is forthcoming regarding the period of this immigration. The list of generations of the present chief of Suu on the north coast goes back 26 generations, and the age of Sulu Vou, according to the genealogies, is calculated by IVENS to be 250 years ⁶⁾. The Ai Seni mountain people of the Morodo Ridge gave IVENS a list of 66 names, but this number much amused the Lau people, who said that colateral branches were also included. The average genealogy in North Mala contains from 20 to 25 names, but we have seen that the artificial islands of North Malaita are more recent than those of Auke and Langalanga ⁷⁾. Further, the fact must be borne in mind that the stone-using immigrants,—like the analogous stone-using immigrants of Saa—after their arrival in Malaita, went into the interior of the country and did not until much later redescend to the coast, so that the inland people have necessarily a longer history than the people of the coast. IVENS has therefore concluded that: "With the memory of the people of Morodo in one's mind, and the certainty that the ridge was occupied in very early times, there does not seem reason to doubt the genealogy of my Ai Seni informant" who spoke of 66 names ⁸⁾. The problem of the absolute chronology of the

1) 404 304. 2) See before and also IVENS 404 223, 409 96. 3) IVENS 404 134-136.

4) Regarding these formal "salutations" used in speeches, etc. see IVENS 404 282 f.

5) IVENS 404 302. 6) 404 69, 72. 7) See also IVENS 406 55. 8) 404 305.

migrations of the stone-using immigrants will be discussed more thoroughly later on.

Sikaiana: A word must be said about this island whose inhabitants racially are almost pure Polynesians with a slight admixture of Micronesian blood. This racial character is borne out by traditions recording immigrations from Tonga, Samoa, and the Gilbert Group¹). Linguistically also they are Polynesian²). Traditions speak of voyages to Malaita, Gao, Taumako, Tikopia, and even to Renell Island, etc.³) and one of the artificial islands of Lau is named "Sikaiana" after men of that island who had drifted in a canoe to the lagoon⁴). On the basis of the chiefly genealogies, WOODFORD has calculated that the Tongan and Samoan invasions took place about 300 years ago⁵).

One of the Samoan invaders who remained on Sikaiana after the return of his companions to Samoa, was Levou. WOODFORD was informed that on Sikaiana there still existed some old stone fortifications, said to have been built under the direction of this Samoan native Levou as a defence against the Tongans, but he did not see these fortifications⁶). The next reference seems to be that of LAMBERT who mentions a stone wall running along the centre of the island from south to north, remnants of which still remain. LEVER saw this wall; it was made of blocks of reef coral, and according to him, "the wall was made to serve as a boundary between the original settlers and those who came subsequently from a place called Luahatu which is probably in either Samoa or Tonga"⁷). CAPELL records that on Sikaiana the general Polynesian word "kaupa", "wall round village" is used⁸).

Florida: The inhabitants of Florida Island vary from dark brown skin to light tawny. Their hair is wavy, and with children almost straight⁹). The language is Melanesian with many words similar to Polynesian¹⁰). Trading relations exist with Guadalcanar and Malaita¹¹). Numerous clan names of Florida agree with those of Guadalcanar where also the ghosts of Florida go; and the clan Simbo or Himbo of Florida and Guadalcanar indicates even a connection with Eddystone (Simbo)¹²). The connection between Malaita (Langalanga), Florida, and Marau Sound (Guadalcanar) has already been discussed (See "Kela" and "Nggela" and the way followed by the figona Walutahanga over Marau, Florida, and Langalanga). The connection

1) WOODFORD 981 165, 168, 984 28, 42-44, BROWN 103 343, GRAEBNER and STEPHAN 300 192. 2) FRIEDERICI 272 290, RAY 705 50, CAPELL 123 170, 124 (1936) 25 f.
3) WOODFORD 984 42-44, 981 166 f, 168, PARKINSON 638 223. 4) IVENS 404 49.
5) 984 42-44. 6) WOODFORD 981 168. 7) 497a 119. 8) 124 31, 147. 9) CODRINGTON 162 265, PENNY 649 45. 10) RAY 705 47. 11) CODRINGTON 160 306, 315, 329, ECKARDT 208 377, EDGE-PARTINGTON 215 129. 12) See HOGGIN 391 399 f, RIVERS 725 II 317 f, CODRINGTON 162 304.

between Langalanga and Florida is also evident from the myth, according to which the first human being from whom the Langalanga people descend was said to have swum from Langalanga to Florida¹). There is also a connection with Isabel Island in so far as the man who introduced the secret society "Matambala" into Florida originally came from Bugotu on Isabel Island²).

Unfortunately, we have very little information regarding megalithic monuments. It has already been mentioned that at the place in Lumu where the figona Walutahanga landed, a pirupiru was founded, but I do not know of any detailed description of this pirupiru. GUPPY³) records that "In Ugi and in Florida the skulls are sometimes preserved in a cairn of stones built on the edge of a sea cliff or at the extremity of a point, or in some remote islet". This is the first mention of stone cairns of this kind, but we shall come across them frequently in the other neighbouring islands.

The belief in ghost sharks is found here also⁴), but, as far as I know, nothing is mentioned in the sources of information with regard to its connection with stone-work.

Sacred Plants. The basket in which the sacrificer takes food for a sacrifice to a ghost is lined with dracaena leaves. At a divination, dracaena leaves are split. Each leaf corresponds to a special tindalo (ghost). If a leaf splits crooked, its corresponding tindalo is deemed to have caused sickness. The pig as the animal of distinction has a soul (tarunga); when a man sells a pig he takes back its tarunga in a dracaena leaf which he hangs up in his house⁵). This is strongly reminiscent of the "fishing for the soul" with the dracaena, which we have so frequently come across, and the connection of the dracaena with the ghosts also corresponds to the important part played by this and the other sacred plants in the cult of the dead in the other regions of Melanesia.

Mythological evidence. In addition to the story of the megalithic figona which brought the pirupiru to Florida and introduced food plants and pigs⁶), the story of Koevasi must be mentioned⁷): Koevasi is a female who made things of all kinds; she herself became the mother of a woman from whom the people of the island descend. She was the creator of death. Koevasi on a voyage once reached Guadalcanar, where she bathed in a certain river and made the water so cold that to this day to wade in it makes one ill.

CODRINGTON has identified Koevasi with Hatuibwari of San Christoval⁸). But although Koevasi is female as is Hatuibwari, she is nevertheless not represented as a figona snake, so that CODRINGTON's opinion is open

1) PARAVICINI 626 157. 2) CODRINGTON 160 94. 3) 314 52. 4) CODRINGTON 160 179, 164 65, RIVERS 725 11 361, COOMBE 170 303. 5) CODRINGTON 160 131 f, 211, 249. 6) See CODRINGTON 160 124, 132, 134, FOX and DREW 264 135. 7) CODRINGTON 160 124, 162 304, COOMBE 170 316 f, 333, HOGGIN 391 400. 8) 160 150.

to doubt. In Florida, there is no direct proof of the association of Koevasi with the stone-using immigrants, but the fact that Koevasi is a creator, and that female culture heroes, particularly the women of the sky, were often associated with the stone-using immigrants, makes it at least probable that Koevasi also belongs to the stone-using immigrants. That this is really the case will clearly follow from the data regarding Guadalcanar.

The connection with Malaita is also evident from the fact that the Vulcanangela story is known in Florida, and that it agrees completely with that of Malaita¹⁾.

Guadalcanar: The following racial differences can be distinguished among the inhabitants of this island speaking a Melanesian language²⁾: In the Veisali District at the north-west end of the island there are, besides very tall people, very small individuals with frizzy hair and varying in colour from light brown to dark brown. On the north coast, opposite Rua Sura Island, a lighter hue of skin is frequent. Inland behind Aola, the height diminishes and the skin is darker; further east, inland of Rere, the people are very tall, as they are also in the eastern part of the south coast, the Mole District³⁾. The relations of Guadalcanar with the surrounding islands are evident from the fact that for most of these islands Marau Sound is the country of the dead, that the megalithic figona Walutahanga wandered over Marau to Florida and Langalanga, and that Koevasi, the creator of Florida, also sojourned in Guadalcanar. The relation with Eddystone appears in the existence of the clan Simbo. Trading relations are very far-reaching, and extend in the east to San Christoval, Ulawa, and even Santa Cruz; in the west to the Cape Marsh Group⁴⁾ and New Georgia, and in the north and north-east to Florida and Langalanga. The mythology furthermore points to connections with Renell Island⁵⁾.

IVENS has shown that some of the people of Marau Sound immigrated from the Areare District on the west coast of South Malaita more than three centuries ago⁶⁾.

The pirupiru brought by the figona Walutahanga to Malapa has already been mentioned. I have no further details about it, but it is possible that this pirupiru is identical with one or other of the types of stone-work which will be mentioned hereafter.

In Makaruka village in the Mole District, some distance from the houses there is, beneath a big tree, the meeting place of the men. This place is

1) See COBRINGTON 162 306 f. 2) CAPELL 122 113, RESCHKE 713 8. 3) PARAVICINI 626 47 f, 82, 90, 94, 99, GUPPY 314 120, 315 280. 4) One island of this group is characteristically called "Lau". HOGGIN 389 25. 5) WOODFORD 979 39, PARAVICINI 626 75, 86, 94, 99, 100, 102, 110, 119, HOGGIN 389 25, 298, 379 238, 248, 249 f, 388 72, KNIBBS 434 209, COBRINGTON 160 294, etc. 6) IVENS 403 25 f, 464, 404 26 f, 410 8 f, 411 330 f, PARAVICINI 626 96, HOGGIN 377 236, RAUCAZ 690 172.

paved with flat stone slabs. Nearby is a smaller place also paved with stone slabs on which pigs are killed ¹⁾).

Makaruka and Billatania villages, also in the Mole District, are built on the coast which in some parts is supported by dry built stone walls. The houses stand upon high foundations of stones collected on the shore. In Aola, the ground on which the huts are built is surrounded by stones or trees, and the interior filled with earth thus forming a house foundation ²⁾. This type of foundation is also found in Veisali as a photo published by PARAVICINI ³⁾ clearly shows, and in the inland village Bualala, the houses are standing "like those on the coast upon earth heaps about 10 cm high" ⁴⁾).

In the Mole District villages Makaruka and Billatania, there is a little courtyard in front of each house enclosed by a low stone wall ⁵⁾, and such courtyards also exist in the village Nagali (north-east coast, inland behind Longgu) as is evident from the photos published by HOGGIN ⁶⁾. In Nagali these fenced-in yards are shown in front of the men's house as well as the other houses. In Veru village near Cape Hunter on the south coast, every house is surrounded by a dry built stone wall ⁷⁾).

In the Aola region, all the villages were formerly fortified, but to-day only the remains of the dry built stone walls which once surrounded the whole village are found ⁸⁾).

In the Marau District, the bodies of the dead were exposed, and after their decomposition the skull was put into a little box of wood or placed on a low round stone cairn and covered with a slab of stone. Female bodies were buried or thrown into the sea. Only the skulls of chiefly women were treated in the same way as those of the men. The skull boxes were placed on the cairn of coral stones, or they stood on a post which itself was set up on the stone cairn ⁹⁾. To this group of stone cairns probably also belongs a stone heap found in Makaruka village upon which the wooden bowl of the chief was deposited ¹⁰⁾. HOGGIN records that on the North-east coast of Guadalcanar the body is buried in a crouching position with the head close to the surface. After decomposition the skull is dug up and put inside either a box-like structure or into a little enclosure of stones roofed over with blocks of coral. In former times the repositories were often enclosed with palisades made from posts carved in the likeness of the men whose skulls were preserved therein ¹¹⁾. Near to Rere there was a village which had a cemetery in which male and female bodies were buried and covered with stone slabs. PARAVICINI, who records this, adds, that this kind of burial was an ancient custom and not introduced by the missionaries ¹²⁾).

1) PARAVICINI 626 101. 2) PARAVICINI 626 77, 100; PARAVICINI's photos 626 9, 15, 17 representing houses of Aola, do not, however, show such house foundations. 3) 626 Pl. 8, see also 130 f. 4) PARAVICINI 626 89; the photos of Bualala given by PARAVICINI 626 Pl. 22, 26, 27, however, do not show this either. 5) PARAVICINI 626 100. 6) 377 Pl. III A, 388 Pl. III B. 7) PARAVICINI 626 109. 8) PARAVICINI 626 76. 9) PARAVICINI 626 96 f., Pl. 29, 30, 31, RAUCAZ 690 Pl. p. 175. 10) PARAVICINI 626 101. 11) 379 249 Pl. II B. 12) 626 79.

The belief in, and the worship of ghost sharks to which sacrifices are offered occurs also on this island ¹⁾. On the north-east coast these sharks have shrines consisting of heaps of stones planted round with croton bushes and other plants sacred to the particular spirit. Priests are in charge of the proceedings when pigs are sacrificed ²⁾. It is possible that these stone heaps are identical with the *pirupiru* of which, as already mentioned, we have no detailed description. HOGGIN does not record the name of these stone heaps connected with shark cult, so that this point remains to be cleared up by future investigation ³⁾. For the sake of quoting integrally the information furnished by various observers, the exact localities have been mentioned above; but it is not intended to imply that the various elements are found only at these places, though it seems that East Guadalcanar has been the most strongly influenced by the megalithic culture. The sources of information regarding Guadalcanar are not complete enough to determine the exact distribution of certain elements.

On this island also special canoes which must not be touched by small boys are used for bonito fishing. From this PARAVICINI has concluded that bonito fishing played a certain part in the initiation ceremonies, but he was unable to learn more about this ⁴⁾.

Sacred Plants. In Nangali village where the fenced-in court yards were found, *cordyline* is growing alongside the men's house ⁵⁾. On the north coast near the estuary of the Nalimbiu River (the San Bernardino of the Spaniards) MENDANA's party came to a certain village where "near the houses were many shrubs of variegated colours fenced in by bamboo. They gave the Spaniards much pleasure because of their perfume" ⁶⁾. Unfortunately no botanical name is recorded, but it is not improbable that they were some of the usual sacred plants cultivated also for ornamental purposes. On the north-eastern coast, before a sacrifice is offered to the dead a priest rubs the pig over with *dracaena* leaves and twigs from a banyan tree. At a dance, the dancers carried bundles of *cordyline* ⁷⁾. Near the ruins of the village Domma on the western part of the north coast, a few *cycas* palms were growing, "the only ones which I saw in the Salomons" says PARAVICINI ⁸⁾. This remark is very interesting. Although it is of course not the subject of this work to study the problem of the distribution of certain plants, it nevertheless appears from the data quoted regarding the use of sacred plants that there is no record of the ritual use of the *cycas* palm in the Solomon Islands. How important the *cycas* palm was in the ritual life of the New Hebrides has already been seen, but proceeding from the New Hebrides over Tikopia and Santa Cruz

1) HOGGIN 377 247 f, 379 244, 257, RIVERS 725 I 243, COOMRE 170 329, PARAVICINI 626 102. 2) HOGGIN 379 250. 3) It is with this reserve that we have marked on our map of distribution the *pirupiru* of Guadalcanar and Florida with the sign for stone circles. 4) 626 73. 5) HOGGIN 388 Pl. III, B. 6) FRIEDERICI 268 107. 7) HOGGIN 379 247, 388 74. 8) 626 64.

to the Solomon Islands the last time we found the cycas palm was as a sign of taboo on Tikopia, that is to say, a use to which it was put on many occasions also in the New Hebrides.

Prehistoric Objects. Only very little information is forthcoming regarding prehistoric objects. In the inland village Bualala, PARAVICINI found a stone slab with a number of depressions similar to stone bowls, as he says. The natives were unable to give any information regarding the origin of this stone, but PARAVICINI is of opinion that it cannot be of very great age, since otherwise the soft stone would be too weather-beaten to permit the depressions still being recognizable¹). In Ravu village on the south coast, PARAVICINI found stone rings lying on great heaps of shell money belonging to a chief, but he gives no details about these stone rings²).

Mythological evidence. Small people with long hair and dark skin who resemble the Kakamora of San Christoval and who are called Mola are said to live in the interior of Guadalcanar. They are said to make stone circles with one round stone in the centre into which they go³). Although it is not our intention to discuss the problem of these widespread stories of short people in Melanesia, their association with stone circles is nevertheless remarkable. The data quoted regarding stone-work show that nothing is known of stone circles in the interior of Guadalcanar, although this does not exclude the possibility of their existence. The pirupiru was said to have been founded on the north-east coast, but we do not know whether it is found in other parts of Guadalcanar too, neither have we much information regarding its form.

From the following it will appear clearly that Koevasi, the female culture hero of Florida, who, as mentioned, also sojourned in Guadalcanar belongs to the stone-using immigrants. According to the story of the hill people of North-east Guadalcanar, Sivotohu is a man in the sky who existed when there was nothing else in the world. One day his wife Koevasi told a hornet to go down to the water below and make the ground. That was Guadalcanar. Koevasi planted two trees, the sambaha (*Ficus*) and the tzili (the cordyline), and then made all the wild things of the bush. Next she told the hornet to break off two leaves from the sambaha and two from the tzili. These changed into men and women who married thus giving rise to the two moieties. Sivotohu looked down and saw what his wife had done, so he sent down food which had to be cultivated, on the end of a long lawyer vine which he afterwards cut. As it fell it broke the island here and there, thus making the rivers and the mountains. The end of the vine, turned into stone, can still be seen in the bush near Tetekantzi⁴). According to another version by the same people, the island was built up out of the sea by two men Tzatta and Tzili, and when they had finished they planted two

1) 626 89. 2) 626 118. 3) Fox 263 335 f. 4) HOGGIN 388 87.

seedlings, one the *Ficus* (sambaha), and the other the cordyline (tzili). An eagle alighted on the ficus and laid two eggs, out of which sprang a man and a woman ¹⁾, and simultaneously two leaves fell from the cordyline and also changed into a man and a woman, thus giving rise to the two moieties. Subsequently the sky spirit, Sivotohu, gave them pigs and all other living things ²⁾.

From an analysis of these two stories it is evident that the female culture hero Koevasi is the wife of a sky-man and apparently lives in the sky herself. The connection of the stone-using immigrants with the sky need not be emphasized. Koevasi, according to one version, is responsible for the erection of the island Guadalcanar, and according to the other version, the island is built up out of the sea by two men one of whom is called "Tzili", "Cordyline", a name very characteristic of the stone-using immigrants. In the same way the word for dracaena formed an element of the names of the light-skinned stone-using immigrant chiefs of Saa, and besides the dracaena we have found the cordyline among the most frequent of the sacred plants of the megalithic people. It is likewise characteristic that the (sky) woman Koevasi plants the cordyline, according to the first version, and that this is done by the island builder "Tzili", "Cordyline", in the second version ³⁾. The real or the mythological erection of an island, has been seen to be a typical incident associated with the stone-using immigrants. The creation of men and women out of the leaves of the cordyline bears strong resemblance to the creation of men out of the dracaena by Qat in the Banks Islands. Whereas Koevasi planted the ficus and cordyline and created also all the wild things of the bush, the sky-man Sivotohu introduced the food plants like many other stone-using culture heroes or the sky-women associated with them. That it was Sivotohu who introduced the pig agrees completely with our conclusion that the pig was introduced by the stone-using immigrants. The making of rivers and mountains is likewise one of the characteristic activities of the stone-using culture heroes equating Sivotohu to Tagaro of Aoba and Pentecost, Wuhngin of Tanna, Mosigsig of Santa Cruz, etc. who, similarly, were found to be topographical shapers. For these reasons it is significant that the lawyer vine of the sky-man Sivotohu turned into stone. We are therefore justified in considering Sivotohu and Koevasi as representatives of the stone-using immigrants.

The hill people of the north-eastern part of the island have a myth according to which a man, as he lay on his death-bed, said to his nephew:

1) This theme occurs also in Isabel, see: RIVERS 725 1 245. 2) HOGGIN 388 64, 67. 3) Regarding the botanical accuracy of these plants HOGGIN has rightly pointed out that "the difference between cordyline and dracaena... is very slight and the identity of a specimen can only be established after a very thorough examination by a botanist", 379 255; similar caution should be observed regarding many of the other sacred plants mentioned in the course of this study, since most of the data at hand are not furnished by botanical experts.

'When I die do not dig up my skull, but wait and you shall have something good'. The nephew after his uncle had been dead for a month decided to dig up the body. He saw that the body was gone and in its place he found a coconut ¹⁾. The fact that this theme was found always to be associated with the stone-using immigrants, equates the introducer of the coconut in our present story with the other stone-using immigrants, although nothing more is known regarding this character.

We have seen that the figona Hatuibwari, after leaving San Christoval, went to the Mole District of Guadalcanar; and the founding of the pirupiru in Marau by the figona Walutahanga was one of the many reasons for attributing the figona worship to the stone-using immigrants ²⁾. According to a Mole District version, the figona died on Mt. Mole which it had ascended, and from its blood sprang the red-violet variety of yams. According to this version the departure from San Christoval took place for the following reasons: A long time ago there lived two chiefs in the Mole District who were continually quarrelling. They therefore made up their minds to emigrate with their people. The one party with their canoes reached Renell Island, where they killed the men and married the women. Their own wives they sent to the still uninhabited Bellona Island. The other chief landed in San Christoval, where he settled down and ordered his people to plant yams. But every night came the snake and ate their fruit. So to induce the snake to leave the island, they gave it a mass of yams; thereupon the snake left, and went to the Mole District ³⁾. It has been seen that the immigration of the Araha to San Christoval proceeded from Marau Sound over Three Sisters and Ugi Islands. The migration recorded in the Mole myth also proceeds from Marau Sound to San Christoval, and the migrants are also chiefs. Their connection with the figona (if only in the sense that they caused it to leave) corresponds to the association of the Araha chiefs with Hatuibwari of San Christoval. Finally, judging from the fact that one of the chiefs ordered his people to plant yams, the introduction of which has often been attributed to the stone-using immigrants (Hatuibwari in San Christoval, the island building turtle in Owa Raha and Owa Riki, the immigrant chiefs in Saa, the figona Walutahanga in Florida, etc.), the identity of these immigrant chiefs of the Mole myth with stone-using immigrants of San Christoval seems to be established.

The female figona Kihuimasanga of the village Tetekantzi in the hills of the north-eastern part of Guadalcanar, is credited with the introduction of taro hitherto unknown to the people of Guadalcanar. When some time in the distant past she arrived with her child in the village, she had with her a taro and a stone "which she said she had picked up in Malaita" ⁴⁾. Un-

1) HOGGIN 388 88. 2) Regarding the figona worship of the north-east coast and the hill district of Guadalcanar, see: HOGGIN 377 249, 379 250 f, 257, IVENS 404 137. 3) PARAVICINI 626 103 f. 4) HOGGIN 388 84 f.

fortunately this information, which is of the highest interest for us is not more detailed.

Savo: Although the original language of this island is Papuan¹⁾ the culture has been considerably modified by successive migrations from Florida, Bugotu (Isabel), Malaita, Cape Marsh Group, and Guadalcanar, and trading relations with Florida, Bugotu, Guadalcanar and Isabel (Gao)²⁾. Thus, for instance, the languages of Florida, Bugotu and other neighbouring islands is also spoken on Savo³⁾. The worship of ghost sharks which is also practised in some parts of the island, but is absent in others⁴⁾ is certainly due to such influences.

COOMBE⁵⁾ publishes a photograph representing "a typical house" of Savo, but does not refer to it in the text. From the picture it is not very clear whether the house stands upon a foundation surrounded by a stone wall, or whether there is a square courtyard in front of the house fenced in by a stone wall. At all events this arrangement, as well as the construction of the house, agrees so completely with Guadalcanar⁶⁾ that there cannot be any doubt about the connection.

All round the coast there are wells which the natives have sunk, the sides being neatly lined with cobblestones. Fully half of these are hot and used for the purpose of bathing, the water being baled out by means of a bucket⁷⁾.

Renell and Bellona: So far as I know, no records of stone-work exist, and it is therefore not necessary to proceed to a thorough investigation of these two islands which are Polynesian in race and language and agree almost completely with each other⁸⁾. They were to a great extent peopled from Wallis Island (Uvea), but show also connections with Tikopia, Sikaiana, San Christoval, Santa Cruz, etc.⁹⁾. Bearing in mind the strong Polynesian character of these islands and the other influences mentioned, the apparent non-existence of stone-work may simply be due to a lack of knowledge. It must further be mentioned that, according to the Renell Island tradition, Kui, the leader of the Uvea immigrants who made his voyage 24 generations ago, is credited with having moulded the topography, making the hills, valleys and the lake of the island. He planted trees and a variety of the yam.

1) SCHMIDT 834 a 152 ff, BUSCHAN 117 49, RIVERS 725 I 248, II 465, RAY 695 123, 705 47 Note 3, COOMBE 170 336, etc. 2) COOMBE 170 334, 337 f, KNIBBS 434 176 f, WOODFORD 979 183-187. 3) CODRINGTON 161 559, SCHMIDT 834 a 152, COOMBE 170 336, WOODFORD 979 187. 4) See: COOMBE 170 335, CODRINGTON 160 197 f, 164 65, RIVERS 725 I 248, II 361. 5) 170 Pl. to face p. 341. 6) Regarding houses of Guadalcanar see: PARAVICINI 626 Pl. 8, 9, 15, 17, 21, 22. 7) KNIBBS 434 178. 8) See LAMBERT 455 142, HOGGIN 376 175, FIRTH 244 179, CODRINGTON 160 2, 162 264, PARAVICINI 626 27, 103, WOODFORD 979 234, 981 167, 982 34, RAY 705 50, TRENCH 898 202, KNIBBS 434 199, 203, etc. 9) FIRTH 244 177 f, 179 f, 185 f, LAMBERT 455 138, WOODFORD 981 168, 984 47 f, etc.

Later other people arrived from Uvea, Tuma and Taumako bringing with them other varieties of yam, taro, coconuts and pawpaw¹⁾. Furthermore, Tanganggoa Tenga'a is known here and is evidently identical with Tanga-loa; and "they also had their Maui", says LAMBERT²⁾.

The shaping of the topography and the introduction of yam, taro and the coconut, have been found to be typical of the stone-using immigrants, but this does not necessarily mean that these immigrants form part of those stone-using immigrants who migrated from the west to the east. The mention of Uvea, Tuma and Taumako as places of origin makes it probable that they were stone-using immigrants wandering back, or blown off from Polynesia after a temporary stay there and on Santa Cruz. WOODFORD, who is also of this opinion³⁾, himself witnessed the arrival of numerous canoes which were blown off from the Reef Islands to Malaita, Ulawa, Ugi and San Christoval, and it is evident that in view of the direction of such drifts, Renell Island cannot have been left untouched. Some other elements of the stone-using immigrants are likely to have come from the Solomon Islands, since we have seen that one of the chiefs of the Mole District of Guadalcanar whom we have regarded as a stone-using immigrant, went from Mole to Renell Island.

Isabel: In the discussion on Malaita, we have shown that the immigration of the stone-using people to North and West Malaita was via South Isabel. We must therefore expect to find traces of the stone-using immigrants also on Isabel.

Racially, there are some dark-skinned, frizzy-haired elements on this island, but there predominate very light-skinned people with somewhat oblique eyes and wavy hair, which with children is almost straight⁴⁾. The Spaniards who, under the leadership of MENDANA, landed at Estrella Bay, give a remarkable description of the inhabitants of this region⁵⁾. The skin of some of the inhabitants, they say, was "almost as white as that of the Spaniards" and the women were "more beautiful and lighter than the Indian women of Peru"; many dyed their hair red, "but with some the hair is naturally red". FRIEDERICI has expressed the opinion that if really the hair was naturally red, this could only apply to albinos⁶⁾, an opinion which is, however, without foundation. If, on the contrary, it is remembered that several of the light-skinned stone-using immigrants were said to have had fair hair (the descendants of the sky-chiefs of Saa, the (Qat) child of Maevo, and particularly the red-haired stone-using immigrants of Malaita) this mention of red hair and light skin is all the more important and significant.

1) HOGGIN 376 177 f, FIRTH 244 185 f, LAMBERT 455 138, according to whom, the voyage of Kui took place only 17 generations ago. 2) 455 146. 3) 984 47 f.

4) RHIE 714 311, SEIDEL 769 105, COBRINGTON 162 265, ELTON 227 92, BUSCHAN 117 160, THURNWALD 881 106. 5) FRIEDERICI 268 32 f, 71. 6) 268 Note 54.

Besides the raids made by the people of New Georgia and Choiseul against Isabel, trading relations were particularly frequent with Roviana and Choiseul and even with Bougainville¹⁾.

In Bugotu, Bishop PATTESON slept in a fortified place thus described: "The site for the village has been chosen on a hill surmounted by steep, almost perpendicular coral rocks. There is a wall of stones of considerable height on that side where the rock is less precipitous, with one narrow entrance, approached only by a ... trunk of a tree, laid ... over a hollow below". So also at Tega the people built a toa, "an impregnable fort on a rocky knoll in the midst of the village"²⁾. These rocky fortresses of Bugotu are also mentioned by COOTE³⁾ who adds that "the approaches are in some cases cut off by the construction of large dykes or fosses". DUMONT D'URVILLE, who was in Thousand Ships Bay in 1838, says⁴⁾: "Devant les maisons on remarque quelquefois de petites terrasses soutenues par des murs en pierres sèches".

With regard to the Wesleyan Mission station Pivihaddi, SEIDEL says: All the houses are surrounded by low stone walls as a protection against the head hunters of the neighbouring islands. Near the station of Vulavu, there is a small coral island, 24 metres above the level of the sea. On a narrow level space on the island the houses are built "and are protected against attacks by coral stone walls 5 feet high, and from 3 to 4 feet thick"⁵⁾. It is not, however, clear from this description whether the walls surround the whole village or single houses only.

Regarding burial, it is recorded that a dead chief was placed upright in a deep grave, and the earth filled in, until it reached the neck; the grave being then about half full, fires were lighted round the head from which the scorched flesh soon dropped, leaving the skull bare, and this was carried to the canoe house and set up to be worshipped. Then the grave was filled in and a heap of stones piled over it, on which sacrifices were offered to the dead⁶⁾.

The belief in, and the worship of ghost sharks occurs on Isabel also⁷⁾.

I am not aware of any information regarding sacred plants.

Mythological evidence. According to a Bugotu story, Kamakajaku dwelt upon the hill at Gaji, and he looked down upon the ocean, and saw it exceedingly dark. So he sent his grandchildren to fetch salt-water for him at the place where he saw the sea so dark. They brought the water, but he was unable to find the blackness in it. So he swam out himself, but when he came to the black spot, a very great king-fish swallowed him

1) RIBBE 714 313, FINSCH 236 288, WOODFORD 979 203, BROWN 103 517, COOMBE 170 344, 346, 355, COOTE 171 184. 2) CODRINGTON 160 302. 3) 171 186, 172 144, 4) 203 V 65. 5) 769 105. 6) BROWN 103 395 f, CODRINGTON 160 257, 162 308 f, COOMBE 170 349 f, 369 f; the records speak of Isabel generally, without definite indications as to the locality. 7) See CODRINGTON 160 179, 162 309, 164 65, RIVERS 725 I 245, II 361.

and went off with him eastwards to the rising sun, till it stranded. Kamakajaku with an obsidian cut his way out of the fish and saw the sun¹). Then he stayed with the sun and the sun's children. Once, when he was alone, and in defiance of the express forbiddance of the sun-children, he removed a stone which was the covering of a hole in the sky, and he looked down on his home and cried longing for it. So they made a house for him, gave him a banana and seed of pau (to dye with), and with a cane let him down to earth, sitting in the house²).

Here again we come across a number of the mythological themes which we have found repeatedly in connection with the stone-using immigrants. The looking down upon the ocean from the hill, reminds one of Ambat of Malekula who, from a hill looked out to the sea where he saw the giant clam. The "grandchildren" whom Kamakajaku sent out without success to fetch the black spot in the sea, are reminiscent of the Ambat brothers whom Ambat, according to one version, sent out to fetch the clam, but who always returned through fear. The swallowing up and the final rescue by the cutting of the fish's belly with a piece of obsidian, the ascension to the sun, etc. agree in all details with the story of Vulangela of Florida and Malaita. The swallowing up and later rescue were further found in connection with the "Delectable Lizard" of Saa, "Born by the side of a bow" of Saa, Warohunuga of San Christoval, and in a somewhat similar way also with Mosigsig of Santa Cruz, i.e. in connection with beings whose identity with Qat-Ambat has clearly been seen. The ascension to the sun, which is certainly but a modified form of the more general ascension to the sky, has been found in many cases in connection with the heroes of the stone-using immigrants. For these reasons we may conclude that Kamakajaku also is a stone-using immigrant.

New Georgia: From Isabel we proceed to the west and reach Roviana (New Georgia), inhabited by the typical black-skinned, frizzy-haired western Solomon Islanders. By war and very intensive trading relations with one another, they are in close reciprocal contact and their culture shows a relative uniformity. The black-skinned people of Roviana have, however, to a certain degree, mixed with light-skinned people who were brought from Isabel as slaves, and with invaders from Guadalcanar³). The language is Melanesian, but contains many words similar to Polynesian⁴). The trading and warlike relations of these western Solomon Islanders are so far-reaching and ramified that a detailed description would demand far too much space. Briefly, there is reciprocal connection between the islands Malaita, Florida, Savo and Guadalcanar in the east and those

1) This story is identical with that of Vulangela of Florida and Malaita, even in its details; cf. COOMBE 170 291 and CODRINGTON 160 365 f. 2) CODRINGTON 160 365 f. 3) RIBBE 714 263, 282, PARAVICINI 626 175, 627 52, 55, THURNWALD 881 105, WILLIAMSON 958 60. 4) RAY 705 47, THURNWALD 881 105.

of Isabel, New Georgia, Eddystone, Renonga, Vellalavella, Choiseul, and even as far as Buin in the west ¹). The existence of the clan "Simbo" in Florida and Guadalcanar as proof of the connection with Eddystone has already been mentioned ²).

The stone-work of New Georgia and the neighbouring islands is very interesting, and its study will contribute in a large measure to the understanding of the culture contact in these regions. The summit of Ivorai, a prominent hill in the Ngarasi District, and the summit of Marovo Island were considered as sacred. On both, there was a large ring of big stones surrounding the summit, inside which none of the natives could be induced to go. The summit of Vongi, another peak, was also considered to be sacred. SOMMERVILLE was informed "that a large fish and a gigantic clam shell lived on the top, who could kill an intruder" ³). This mention of a large (man-eating?) fish, and of the giant clam on a summit, on some of which stone circles were found, is therefore of special interest, since we now know that these things are associated with the stone-using immigrants. Unfortunately no myths, as far as I know, are recorded from New Georgia, and it is therefore all the more regrettable that SOMMERVILLE's information regarding the clam and the large fish is not more detailed.

Just off the coast, near Munggeri, there was a small islet called Olowotu which was entirely artificial. It was completely built of large coral stones on the flat fringing reef surrounding the shore, to which SOMMERVILLE found traces of its having been once joined by a causeway perhaps 30 yards long. The islet was roughly rectangular, and on the shore side of it a sort of square, heavily built arch had been erected. It was just possible to walk beneath the strong beams of wood that supported the "masonry", fully four feet deep, that formed the crown of the arch. On its top, SOMMERVILLE found several carved figures in coral stone, representing human heads and frigate birds, all about life-size. A few bushes grew on the lower part of this place, and one small coconut tree, to which SOMMERVILLE was intending to affix a surveying mark; but the "King" of Munggeri besought him not to do so, as it was "a very sacred island". (Whether the coconut tree too was considered to be of sacred character, unfortunately is not clear from this information.) A somewhat similar place occurred on the sea-side of the barrier chain of islands surrounding this part of the coast. Further there was Kicha, a small island off the coast, the last of the New Georgian group to the south-east, which is also sacred, and forbidden to women. On this island a "hope" (sacred being) called "Mateava" is living ⁴). SOMMERVILLE does not say whether this island was natural or artificial, neither are we given more detailed information regarding "Ma-

1) FINSCH 236 49, 481, WEDGWOOD 923 13, THURNWALD 878 35, 883 528, PARKINSON 633 29, EDGE-PARTINGTON 213 121, SCHNEE 837 78, RIBBE 714 263, 266, 300, 302, 313, WILLIAMSON 958 17 f, KNIBBS 434 38, WOODFORD 983 510 etc. etc. 2) See: THURNWALD 881 106. 3) SOMMERVILLE 786 390, 398 f. 4) SOMMERVILLE 786 390.

teava". Can there be any relation between "Mateava" and Matawa or Atawa? This question remains to be solved.

Stone walls built up of coral blocks which run out into the sea have been mentioned by several writers. On the land within a certain distance of the shore, these stone walls which are about 3 feet high, form semicircles or ovals open to the sea. It does not follow from the information at hand that these stone walls on the landside surround the houses which are situated on the shore thus forming a village wall. RIBBE¹⁾ records: "Am Strande befinden sich wohl vor jeder Eingeborenen Wohnung mehrere in die See hinaus gehende Steinwälle". SOMMERVILLE records that these walls are "abreast of any seaside house"²⁾ and according to BÄSSLER³⁾ these walls are from 10 to 12 feet distant from the shore. It is therefore improbable that they formed a village enclosure at the same time, and this seems to be confirmed by a photo published by BROWN⁴⁾. The top of these piers is usually made flat and comfortable for walking upon, with earth laid in the chinks of the stones. The women bathe in the vicinity of these piers and the men sit there doing their work⁵⁾. Apart from the case where, according to SOMMERVILLE, these piers link the shore with the artificial island of Olowotu, this use is not mentioned by any other writer.

The importance of SOMMERVILLE's information can hardly be over-estimated. In the first place, we are again confronted with an artificial island which can obviously be identified with Taumako Island and the artificial islands of Malaita; secondly the fact that the artificial island Olowotu is connected by a pier with the mainland agrees completely with the "bastions" of Santa Cruz, which were also connected with the shore by walls running out into the sea, a resemblance which is an additional argument in favour of the opinion that the "bastions" of Santa Cruz were simply smaller artificial islands. Another fact also is clearly apparent from the description of Olowotu Island, viz. the non-defensive character of these artificial islands. In fact, it is hardly conceivable that an island built up for defence purposes should be connected with the shore by a stone pier which was, as we have seen, in all the other cases mentioned, levelled and comfortable for walking upon. And this non-defensive character is also apparent in the case of the artificial islands of Malaita and Santa Cruz.

Discussing the disposal of the dead, RIBBE⁶⁾ informs us that the little box-like structures containing the skulls are brought to the "tambu houses" which are built on the little artificial islands, "and only the tambu man may visit this place". This use of the artificial islands as burial places is all the more interesting when compared with the story of Bora i Gao of Malaita, who asked his son to make him an artificial island on which to die. It should, however, be noted that RIBBE's information is confirmed by none

1) 714 278. 2) 786 368. 3) 36 349. 4) 103 to face p. 344. 5) RIBBE 714 178, SOMMERVILLE 786 368 f, BÄSSLER 36 347, 349. 6) 714 276.

of the writers who have given records regarding the disposal of the dead. Also SOMMERVILLE says ¹⁾ "Islands off the coast are almost invariably chosen as places of sepulture", but he does not say whether by these the artificial islands are meant. But RIBBE's information that these islands were used for burial purposes seems to be borne out by the fact that the artificial island Olowotu was "a very sacred island" and that the island Kicha, was sacred and forbidden for women. From this, however, it must not be concluded that all the artificial islands of Melanesia were erected to serve as burial places; this would be in contradiction with the numerous data previously given, but it is highly probable that it applies to a certain number of them.

The arch-like door of beams of wood built in the stone wall of the artificial island Olowotu is of interest, since its construction agrees completely with the door of an artificial island of Malaita as pictured by COOMBE ²⁾. The same stone-carved heads and stone statues representing frigate birds were found on the heo graves and round the Wabina stone of San Christoval whose association with the Araha has been shown. We have in numerous cases already observed the importance of the frigate bird in connection with the stone-using immigrants.

BÄSSLER mentions a fairly great number of houses on Roviana, and SOMMERVILLE records one house situated on the shore of Munggeri all of which were built on a masonry platform of coral stones ³⁾, but we are not told what kind of houses these were. All the other records about house building known to me ⁴⁾ make no mention of stone foundations.

On the shore near the sea, there were a number of circular stone enclosures built of coral stones like the piers and of the same height. These are ponds for turtles and fishes ⁵⁾. If still further proof were needed that the stone-using immigrants who introduced the stone-work into New Georgia,—and about whom we unfortunately have no myths,—were identical with those of the other Solomon Islands, this is furnished by the very existence of these stone ponds. Thus Red-Head of Malaita kept turtles in a pool, the name of the San Christoval hero Warohunugaraiia—whose brother was the Qat of San Christoval—signified "Keep Tame Fish"; and Tagaro of Maevo also had a fish pool of stone.

In New Georgia and Kulambangra, after the death of a chief, a heap or cairn of coral stones in the middle of which a hole is left is erected near the sea. In this hole the body is buried "kneeling", as PARAVICINI says ⁶⁾, after which the hole is filled in with stones. WILLIAMSON adds that "sometimes the cairn rises from front to back in stages, but usually the stones are merely piled up loosely" ⁷⁾. It is the practice of the people to make

1) 786 403. 2) 170 Pl. to face p. 268, below. 3) BÄSSLER 36 347, SOMMERVILLE 786 369. 4) See: WILLIAMSON 958 24 f, 89, 108 f, RIBBE 714 270, 276 f, 278, BÄSSLER 36 348, EDGE-PARTINGTON 214 161, SOMMERVILLE 786 366 f, PARAVICINI 626 176, Pl. 76, 77, WOODFORD 979 150, 152, etc. 5) BÄSSLER 36 349, SOMMERVILLE 786 368 f. 6) 626 181, 627 55. 7) 958 66.

offerings to the ghosts on these stone heaps. After decomposition the skull is taken out and in many cases put into a box set upon a post which itself is set up on the cairn. Sometimes this is also done with some of the other bones or, in case of cremation, with the ashes of the dead. The skull boxes are mostly of wood, but, as in Guadalcanar, some of them are made of thin limestone slabs. Female bodies are buried in the forest, only chiefs' wives being treated in the same way as the men. In some cases a figure of a man carved out of the trunk of a tree is placed on the top of the cairn, and sometimes skull box and figure occur side by side. In some cases the skull, instead of being placed in a box, is put in the head of a large more than life-size figure of a man carved in wood intended to represent the deceased¹). These korwar-like figures which are identical with those of North-east Guadalcanar, in function agree completely with monoliths which, in Melanesia, generally represent the dead; and they are likewise identical with the carved images of the Hebrides, for instance. Although there are no monoliths in New Georgia²) they occur on the neighbouring and culturally similar Eddystone Island, and it is therefore all the more probable that these wooden images are but a substitute for monoliths.

Near one of these stone cairn graves SOMMERVILLE found "a little circular garden surrounded with stones in which grew a young dracaena plant and one or two crotons. All three were placed, closely adjacent, on a specially levelled plot, built up with stones, and having a slight embankment wall on one side"³). This corresponds to the pirupiru of San Christoval and to most of the other stone circles mentioned, in which the skulls were buried, or the skulls and bones deposited. In the stone circle of New Georgia no deposition or burial of skulls takes place, but it is significant that this stone circle was found by the side of a grave.

A distinction must be made between the stone graves and the similar altar-like heaps of coral stones on which lie a great number of skulls and on which sacrifices are also offered. On these cairns of stones too is placed a rude anthropomorphous figure invariably carved out of a tree-fern stump. In one case, in Roviana, which FESTETICS DE TOLNA has described, a big stone carved in the shape of a cross and richly ornamented with inlaid work of shells and mother of pearl, etc. was set up on the stone heap on which numerous skulls were lying. How far this cross shape of the stone is due to European influence the author does not say, but SOMMERVILLE also mentions "curiously shaped coral stones" surmounting the stone altars⁴). The stone cairns on the neighbouring Eddystone Island have also one or more monoliths besides wooden images and it is therefore probable

1) SOMMERVILLE 786 403, WILLIAMSON 958 66-68, Pl. frontispiece, 961 67, PARAVICINI 626 181 f, Pl. 82, 83, RIBBE 714 276, EDGE-PARTINGTON-YOYCE 213 129, fig. 7, BROWN 103, pl. to face p. 516. 2) SOMMERVILLE 786 398. 3) SOMMERVILLE 736 404. 4) 786 386.

that here too monoliths are meant, or that the "curiously shaped coral stones" go back to the use of monoliths. Women are not allowed to approach these sacred places ¹⁾).

Nothing definite is known regarding the purpose of these stone heaps. According to FESTETICS DE TOLNA ²⁾ they are erected in memory of the head-hunting raids of a chief; according to SOMMERVILLE ³⁾ they are the protectors of the village; and according to WILLIAMSON ⁴⁾ they were "sacred to the memory of twenty chiefs".

One of the supporting posts of the chief's house is considered to be sacred. Round the foot of this post there is a heap of small coral stones, on which offerings are laid ⁵⁾).

Sharks which are considered to be sacred must not be eaten here ⁶⁾).

I am not aware of any information on the subject of sacred plants other than those mentioned, and, as I have already said, I know of no record of myths.

Prehistoric objects. For cooking and for the crushing of nuts or any hard food, bowls of volcanic stone are used here, and not wooden bowls as in the Southern Solomons nor earthenware pots as in the northern islands. These stone bowls are sometimes cylindrical in shape, sometimes like a ball, or they are oblong. PARAVICINI had considerable trouble in obtaining some of them, since the manufacture of these bowls is a lost art ⁷⁾. In Gizo Island, south-west of Kulambangra, on the site of an old village, WOODFORD found a fragment of a native ring of volcanic stone, which a native said was a kind of armlet that used formerly to be made upon the island of Kulambangra ⁸⁾. This stone ring may be compared to those found on Guadalcanar.

Eddystone: On this island, where the language is Melanesian ⁹⁾, the dark-skinned type of the Solomon Islanders is again found ¹⁰⁾. As already mentioned, trading relations link up the Solomon Islands, from Malaita, Florida and Guadalcanar in the east to Bougainville in the west. The Eddystone Islanders raid New Georgia, Murray Islands, Isabel and Choiseul, and trading relations exist with the Shortland Islands, Bougainville, Choiseul, Vellalavella, Roviana, Savo and Guadalcanar ¹¹⁾.

The dancing ground is an open circular space with an upright stele or tree in the centre. The circumference of the ground is marked by a circle of upright stones about one and a half feet high. There is a dancing ground

1) WATSON 929 253, SOMMERVILLE 786 386 f, 390 f, FESTETICS DE TOLNA 234 328-332 Pl. p. 331, WILLIAMSON 958 67, WOODFORD 979 149 f, Pl. to face p. 150. 2) 234 328 f. 3) 786 387. 4) 958 67. 5) SOMMERVILLE 786 366. 6) HOCART 366 150, SOMMERVILLE 786 381, 386. 7) PARAVICINI 626 177 Pl. 77, 628 12, SOMMERVILLE 786 375. 8) WOODFORD-EDGE-PARTINGTON 966 101 fig. 2 p. 100. 9) HOCART 362 75. 10) BÄSSLER 36 334, HOCART 362 74, THURNWALD 881 105. 11) HOCART 368 301, 303, 371 97 f, 102, BÄSSLER 36 336, 339, FINSCH 236 90, GUPPY 314 16, RIVERS 725 II 318, etc.

where the tree is a *canarium* sp. 1). This arrangement of monoliths round the dancing ground agrees with the arrangement found in Malekula, Vao and Atchin. Unfortunately HOCART does not mention the other trees which stood in the centre of this place, but the fact that their function is apparently similar to that of the monoliths makes it probable that they were sacred plants.

The houses are not grouped together in closed village compounds but stand singly or in twos at some distance from one another upon dry built stone foundations about 2 feet high 2).

In normal burial they wrap up the body and carry it to the shore. One man's body was placed on a tree in a wooden framework, apparently called *era*. Other bodies were placed on the rocks in a sitting position. Their belongings may be left beside the corpse, or in a special stone chamber called *era*. The bodies of chiefs were left in special stone enclosures called *era*, and were placed in the same position as a commoner's; the head is propped up with sticks and appears above the wall 3). From this description it seems probable that the chiefs were left in the stone enclosure in the sitting position which we have attributed to the culture of the stone-using immigrant chiefs. In the case of a chief's wife who followed her husband to death by hanging herself, they also made an enclosure (*era*) and put her in 4). From this it is evident that the word "*era*" is applied to the wooden framework as well as to the stone enclosures. One is inclined to identify this word with the "*hera*" of San Christoval which we have seen to be the synonym of "*heo*". — Later the skull is removed and put into a little skull house, similar to those mentioned in Guadalcanar and Roviana. The majority of these little skull houses are of wood, but, as in Guadalcanar and Roviana, there are also stone skull boxes, suggestive rather of diminutive dolmens. The walls are made of unhewn slabs and other slabs are laid upon them. According to ELKINGTON 5) these stone skull boxes contain the skulls of chiefs only. Both wooden and stone skull boxes stand on stone heaps about 3 feet high, at the foot of which lies a small fire-place of heaped stones for sacrifices, which are offered here as on the analogous stone heaps of the neighbouring islands mentioned. There is usually a certain tree beside the skull box, but HOCART unfortunately does not record the botanical name of this tree 6).

If it is not possible to produce a man's head it is represented by an upright stone called *ngele*. These stones are not hewn, but are set up as they are

1) HOCART 368 304, 318. 2) BÄSSLER 36 339, 344. FESTETICS DE TOLNA 234 Pl. p. 339. 3) HOCART 362 81 f. 4) HOCART 362 86. 5) 226 127, see also: Pl. between p. 126 and 172. 6) HOCART 362 90, 103-105, 111, Pl. VII fig. 4, Pl. VIII, Pl. IX; see also FESTETICS DE TOLNA 234 335 Pl. p. 335 and 336, who, however, considers that the skulls captured on a head-hunting expedition were kept as trophies by the chiefs in these skull houses on a stone heap, an explanation he had already erroneously given for Roviana.

found. They are generally long stones, more or less square in section, sometimes broad and flat, but always angular. They appear beside many skull houses. Occasionally a wooden head is set up instead, but HOCART also saw a head carved in stone representing a native and lying on a stone heap. The process of setting up a ngele stone is called "vatigoro", "to cause to sit", since when burnt offerings are made the soul sits (tigoro) on the stele in order to eat of the offerings; such stones are not considered to be as good as heads because they have no mouths. They are sometimes referred to as "tomata patu", that is "stone ghosts"¹). This shows clearly that these monoliths are held to be the seat or embodiment of the spirits of the dead, and in this they completely agree with the other monoliths of Melanesia. Further, the carved stone heads are identical with the stone heads found on San Christoval and on the artificial island Olowotu.

As in the other neighbouring Solomon Islands, a distinction must be made between stone altars and these stone heaps for the dead. The altars are also heaps of stones serving different purposes, and having one or more upright monoliths (ngele) or tree-fern images²). These altars, called ara, were dedicated to the spirits of madness, to spirits who cause sickness, to ghosts and to gods³). Offerings are made on them, to make these beings propitious to the coconuts, to protect property, to appeal to them in divinations, to ask them for health, security, etc.⁴). One of these stone altars stands at the foot of a coconut palm, another at the foot of an aunu tree (not identified botanically) in the centre of the dancing ground⁵).

Bonito shrines consisting also of heaps of stones with one or more upright monoliths (ngele) are found on the shore. On some of these bonito altars there is a wooden or coral-stone head of a man. Sacrifices consisting of bonito, and other things are offered here, and prayers are said for a successful bonito fishing expedition. HOCART has pointed out that some of the bonito shrines are of Vellalavella origin, since the prayers said in connection with them contain Vellalavella words. At these shrines rites are performed in connection with the boys' first bonito fishing, the establishment of a new altar, the burnt offering of the tenth bonito, the inauguration of a new canoe, etc.⁶). These rites certainly bear a strong resemblance to the maraufu and malaohu ceremonies of San Christoval, Owa Raha, Owa Riki, Saa, Ulawa and Malaita, traces of which were also found on Guadalcanar. Their connection with megalithic stone-work on Eddystone is additional proof that here, as in the other Solomon Islands,

1) HOCART 362 92 Pl. VII fig. 1. 2) Cf. Roviana, where, on the analogous stone altars, besides the same tree-fern images, "curiously shaped coral stones" or a stone cross were found. These tree-fern images again are reminiscent of the tree-fern images of the New Hebrides. 3) HOCART has shown how indeterminate are the limits of the conceptions of ghosts, spirits, and gods with these people. 362 259, 261, 271, 282. 4) HOCART 362 263, 265, 267, 269, 270 f, 282, 284, 368 308, 316. 5) HOCART 362 266, 270. 6) HOCART 371 104 f, 107-109.

the ritual bonito fishing forms part of the culture of the stone-using immigrants.

In Sosoi village, four big broad monoliths (ngele), many slabs lying on the ground and a number of vonyamboe trees were dedicated to a god. "This god... planted there a tree called njiri gogoto, or "true dracaena", which is not found elsewhere in the island" ¹⁾. Although we have no detailed description of the "god", his association with megalithic stonework, and the fact that it was he who planted the dracaena, is clear proof that this "god" is a stone-using immigrant, and at the same time shows the familiar connection of these immigrants with the sacred plants.

At a certain place there are five upright stones known as "The Five Frigate Birds in Na Sanga". They were once men, not birds; they fought in many places, but an enemy cast a charm upon them in revenge and drove them mad. When they died they turned into stone ²⁾. Unfortunately nothing more is recorded regarding these men, but by their having changed into upright stones, and by their association with the frigate bird, it is highly probable that they were stone-using immigrants. The association of the frigate bird with the stone-using immigrants is furthermore borne out by the following: On the stone altar of a certain god who causes the north-east wind, there is a long monolith (ngele) representing a frigate bird "because it flies about when a storm is impending" ³⁾.

The belief in ghost sharks exists here again. HOCART states that the conception is that of bodily changing of the dead into sharks rather than the idea of incarnation, "if they had any clear notion on the subject at all" ⁴⁾. It may further be mentioned that the weather god Kolondavi, who came from Choiseul and who taught the people how to build skull houses, was a shark ⁵⁾.

Sacred Plants. The rite of the catching of the soul with a dracaena leaf after death is found here again. The soul is believed to pass into the dracaena leaf which therefore is itself called "the soul". Then it is disposed of in different ways. Against madness the magician says: "Come down and depart, you mad spirits". Then he places a dracaena leaf on the patient's hair, tears the leaf in twain and ties the split dracaena round the neck. In the magic against tumor, cough, soreness, dizziness, epilepsy, internal pains, to prevent contagion, etc. dracaena leaves, the dracaena variety njiri piru for instance, are used in various ways, the underlying idea in the magical act being the "driving away" of evil influences. When a priest returns from the place of a certain god nobody may speak to him. If anyone does so he gets a wry-neck which the priest cures by whipping with a dracaena the inside of the house saying: "I whip you away, the god of ... and let this man here live". To detect a sorcerer, a dracaena is held and pointed all round in every direction. When it points in the right

1) HOCART 362 280. 2) HOCART 362 264f. 3) HOCART 362 293. 4) HOCART 365 292, 366 150, 362 278, 284, 291, 294. 5) HOCART 362 291.

direction, the spirit makes it quiver. A certain spirit, called Kita, causes a man to waste away. There is a dracaena known as Njiri Kita; whoever touches it will waste away¹).

Mythological evidence. Unfortunately we have but little information about myths regarding this island. The principal god, whose name seems to have been Vanavana, made the hill Patukio. In competition with a god of Renonga Island to see who could build the higher mountain, Vanavana won, but his adversary threw an enormous stone on his island dividing it into two. It was Vanavana who created the people of Eddystone but without bodily openings and with straight legs which could not bend. So he called for the Mad Spirit who cut up the limbs and bodily openings, but in shaping them he also made them mortal²). Another legend explains why there is no taro in Eddystone. The god planted taro in Eddystone but not the banana, so that there was nothing but taro on this island. The god once decided to make a pudding as an experiment. He took taro and pounded it in a mortar. When he turned the mortar over the pudding did not come out well, but was sticky. Finding the taro bad he said: "Do not grow taro in my country, go away to Vellalavella and Renonga; as for my country, let bananas grow". The god's mortar is a depression in the reef. The god also gave the people of Eddystone their language³).

The shaping of the country, the creation of the people and their language and the separation of the limbs and bodily openings (although not by Vanavana himself) equate this god to the stone-using immigrants. The last theme, it will be remembered,—more or less similar—is recorded in connection with the sky-beings Yetar and Tautai of Santo, the children of the sky-woman of Fate, the man of Santa Cruz who ascended to the sky, etc. Here, too, these people are the culture bringers who introduce food plants like the other stone-using immigrants. Although it is not explicitly said that the mortar of the god was of stone, the present petrified form makes this at least in some way probable, and this assumption is furthermore strengthened if one bears in mind the analogous information regarding Ambat of Seniang and Red Head of Malaita. It is further of interest to note that this stone-using hero Vanavana used his mortar in the same way as Ambat, namely, for the pounding of his pudding.

Another myth relates the story of the god Magoana who lived in Eddystone. He had a canoe which he had made out of a banana spathe. He also had a ring which his wife threw into the sea, so he dived to search for it. He stayed a few days with three men at the bottom of the sea, then took his ring and prepared to go. Now a small coconut tree was at the bottom of the sea. The three men bade Magoana climb the coconut, which he did, carrying with him a bunch of bananas which the men had given to him. As he climbed, the coconut began to grow. On reaching the surface

1) HOCART 362 83 f, 91, 100, 267, 282, 365 231, 236, 238, 241, 243-245, 247 f, 253, 256, 368 310, 372 9. 2) HOCART 362 271 f, KNIBBS 434 174. 3) HOCART 362 272 f.

of the sea he took one coconut and walked home with it and the ring. He planted the coconut, so that there are now plenty of them in Eddystone. He also planted his banana spathe canoe, and now there are plenty of bananas in Eddystone¹).

Here, again, we have the theme of the miraculous growing of a tree taking up with it the man who climbs it, though in a somewhat different way from the other stories of the stone-using immigrants. That this god planted the coconut agrees completely with our conclusion that the coconut was introduced by the stone-using immigrants. That the coconut was originally planted at the bottom of the sea from where the god also brought the banana, is reminiscent of the turtle hero of Owa Raha who fished up the island after having planted it with coconuts, bananas and other food plants at the bottom of the sea, and of the stone-using immigrants of Saa who fished up the yams rooted firmly at the bottom of the sea. The making of the canoe out of a banana spathe agrees with the story of the culture hero Mosigsig of Santa Cruz who made his canoe out of a rotten hollow bread-fruit. We are not told whether Magoana's ring was of stone; but if it was, this would be additional proof that the prehistoric stone rings of Gizo and Guadalcanar—the latter characteristically the property of a chief—belong to the culture of the stone-using immigrants.

Renonga: The types of stone-work found on this island north of Eddystone are similar to those of the latter island, and its culture resembles that of Eddystone. It has also the same trading relations with Isabel, Choiseul, Roviana and Bougainville as Eddystone²).

For a man who had been killed in a raid on Isabel and whose head had not been saved, a monolith (ngele) was set up³).

In front of the house of the chief there was an altar consisting of a block of wood upon which was a human head carved in stone or made of clay⁴) as on San Christoval, Olowotu and Eddystone.

In the story of the creator god Vanavana of Eddystone, it has been seen that his adversary was a god of Renonga, but there is no record of other Renonga myths of interest for us.

Vellalavella: The black skin and frizzy hair type of the Northern Solomon Islands is also found on Vellalavella⁵), but these elements have become strongly mixed with the older inhabitants of the mountains⁶); this is discernable also in the language which, in spite of some Melanesian elements, must be considered as Papuan⁷). Besides trading relations with the neighbouring islands Eddystone, Roviana and Renonga, raids are made

1) HOCART 362 278 f. 2) RIBBE 714 239 f, 250, 717 68. 3) HOCART 368 304.
4) RIBBE 717 76. 5) NICHOLSON 618 13, COOMBE 170 XXI. 6) THURNWALD 881
105, 110. 7) NICHOLSON 618 16, RIVERS 725 1 252, 11 196 f, 465, 711 III 522, RAY
695 124, 705 47 Note 3, FRIEDERICI 272 307, THURNWALD 883 529.

particularly against Choiseul¹). The migration which took place from Vellalavella to Mono Island will be discussed later on.

The only information of interest known to me is that given by THURNWALD. He records that the body of the dead is brought to Njope, a little island, where it is deposited in the sitting position between stones. After decomposition, the bones remain here, but the skull is placed in a little skull house²). The expression "between stones" is, however, so vague that we do not know whether an intentional arrangement of stones is meant. Therefore it cannot be decided whether there is any similarity between this and the stone enclosures "era" of Eddystone and the other stone graves mentioned. Elsewhere³) THURNWALD says regarding this disposal of the dead: "Steine, die aufgeschichtet werden, halten so die Leiche", but again nothing is said of the manner in which the stones are heaped up. PARAVICINI, in his brief survey of the Solomon Islands says⁴): "On Vellalavella, as in the whole group of New Georgia, the bodies are buried in heaps of stones until their complete decomposition... Later the skulls are laid in caves".

Choiseul: In this island we again come across a population which, racially, is a mixture of the Melanesian Solomon Islanders and the aborigines of the mountain regions⁵). In the Melanesian languages of Bambatana and Tambatamba there are accordingly "viele Anklänge an Buin", where the language is Papuan⁶). Trading relations exist not only between Bambatana and Tambatamba, but also with Roviana, Vellalavella, Kulambangra in the south, the Shortland Islands and Bougainville in the west, and Isabel in the south-east⁷) modifying the culture of this island.

In an inland village of the north-east coast some of the huts were built "upon cairns of stones"⁸), but we are not told what kind of houses are these which are distinguished in this way from the other houses.

On an islet in Choiseul Bay (on the north-east end of the island) GUPPY found two cairns, one of which contained two skulls⁹).

Of Bambatana, THURNWALD gives the following information¹⁰): "Cubical stone monuments are erected (one side about 6 feet) on places where a "matisana" meteor fell to the earth. Little houses for sacrifices are placed upon this monument, and a coconut palm is also planted on it. I found two of these monuments on that part of the shore which is covered at high tide, but dry at low tide". In view of the information recorded about Melanesia, this seems to be quite an unusual reason for the erection of stone-work, but, of course, would not be sufficient to raise any doubt as to the exactitude of THURNWALD's information. The question will, however,

1) RIBBE 714 254, FINSCH 236 288, THURNWALD 878 III 35, 883 529, 532, etc.
2) THURNWALD 878 III 27. 3) 883 530. 4) 628 22. 5) THURNWALD 881 105, 107. 6) THURNWALD 883 529. 7) THURNWALD 878 III 35, 881 109, 883 527 f, RIBBE 714 317, 322, etc. 8) COLLINSON 166 173-175. 9) 314 52. 10) 878 I 338, 883 531.

be discussed later when we come across similar stone-work in other places.

Equally vague as the information THURNWALD has given regarding Vellavella is that which he gives for Choiseul in saying ¹⁾: "Die Toten werden vielfach in Bambatana und Tambatamba zwischen Steinen... gestützt in Hockerstellung ausgestellt und so gelassen bis sie verfault sind; dann wird der Schädel und einige Knochen... in einem Totenhäuschen... beigesetzt."

Inland behind the village of Mamarana, BERNATZIK came across a little hill covered with dense shrubs. When he cleared the spot he discovered three big stone urns standing upon an enormous stone slab which was hewn out of a rock. The urns were richly decorated with curious reliefs. In all the urns remains of burnt bones were found. The natives said that in former times many of these urns were to be found on Choiseul, but that they had been destroyed at the request of the missionaries ²⁾. PARAVICINI speaks of "stone-sarcophagi" in which the bones were deposited ³⁾, but gives no details. These stone urns are the only ones found in Melanesia, as far as I can see. Whether they are a local modification of another type of megalithic stone-work, whether there is any connection between them and the sepulchral pottery of the stone-using immigrants, or finally, whether they may be attributed to a particular wave of the stone-using immigrants, I am unable to decide until more is known of the culture of the stone-using immigrants on Choiseul.

Ontong Java, Tasman Islands, and Mortlock Islands: Before continuing our study in the Western Solomons, we must turn our attention to these islands, of which we shall give only a brief survey, since their culture and race are almost entirely constituted of elements which came from beyond Melanesia. A thorough investigation of these islands would require comparison with Micronesia and Polynesia, a task which is beyond the limit of this work. Linguistically, Ontong Java is Polynesian ⁴⁾, but contrary to the opinion of earlier students who maintained that Polynesian influences prevailed ⁵⁾ the physical characteristics have been shown by SCHAPIRO to point clearly to the Carolines ⁶⁾. The existing traditions of Ontong Java tell of immigrations from the Ellice Group, Gilbert Islands, the Caroline Islands and visits from Sikaiana. The people who came in canoes blown from the Solomon Islands and New Ireland are certainly the cause of the faint Melanesian features which are found here. Other more recent records also speak of Ontong Java canoes blown to Buka, Bougainville, Choiseul

1) 878 111 27. 2) BERNATZIK 70 75 f, Pl. 44 p. 57. 3) 628 22. 4) WOODFORD 979 232, 984 32, FRIEDERICI 272 290, BROWN 106 530 f, 102 416, 526, HOGGIN 375 27, 382 146, 383 403, 384 601, PARKINSON 631 146, 638 215, RAY 705 50, COBBINGTON 163 32. 5) For data of physical anthropology see: FINSCH 240 110 f, HOGGIN 375 27, 383 403, 405, COLLINSON 166 38, 41, WOODFORD 978 134, THURNWALD 881 103, SCHNEE 837 28, PARKINSON 630 518, 523, 631 111, 638 215 f, BROWN 103 526, 106 531. 6) 809 368 f, 373, 375, 810 272 f.

and Isabel¹⁾. Tasman Island, where, according to tradition, Ontong Java people settled, has intensive trading relations with Ontong Java; and Mortlock Island, was also invaded by Ontong Java people both in the course of regular migrations and by canoes driven there. Both these islands agree so much in language, culture, and race with Ontong Java²⁾ that a study of all three islands can be combined.

The large common cemeteries of Ontong Java in which, contrary to the general custom in the Pacific, all the dead are buried, and which are remarkable for their resemblance to our own cemeteries, have surprised many visitors, and have therefore frequently been described. The graves are arranged in rows, side by side, and at the head of each grave stands a large upright headstone made from a slab of hewn coral which in many cases was highly coloured. Some of these stones were carved in the shape of a cross. The monolith over the grave of a certain chief was about 12 feet high and 3 feet or 4 feet wide. PARKINSON is the only writer to say of these monoliths: "They represent the spirits of the dead"³⁾. These cemeteries are entirely a native institution and not influenced in any way by European contact⁴⁾.

On Ontong Java, a memorial is also erected to those who are drowned at sea, who drift away in canoes or who die a sudden death. These memorials are small standing posts, either of hard wood or coral. They are from 18 inches to 2 feet in height, cylindrical in shape, with a rounded top, and about 4 to 6 inches in diameter. They are painted or stained red on the top and placed near the door of the house of the dead⁵⁾. Something similar is recorded by PARKINSON of the Mortlock Islands, of which he says: "In front of several houses small conical stone blocks were set up which represent the spirits of the dead. The ground around them was carefully strewn with gravel, and food was deposited near some of these stone blocks"⁶⁾.

The building ground of the temples of Ontong Java is elevated to the height of more than 3 feet by the heaping up of coral stones⁷⁾. At one end of the temple there were rudely-carved wooden figures, and outside the temple there was an old standing stone representing the immigrant gods. Various logs and slabs of coral standing outside the temple were likewise regarded as representations of gods and treated with

1) WOODFORD 979 232 f, 984 32 f, 985 548, HOGGIN 387 202 f, 215 f, 218, PARKINSON 631 108 f, 640 185 f, COLLINSON 166 42, BROWN 102 416 f, BEASLEY 52 59. 2) HOGGIN 387 214 f, 375 31, RAY 705 50, CHINNERY 146 67, 72, 83, PARKINSON 630 518, 523 f, 631 137, 638 208, 221, THURNWALD 881 103, SCHNEE 837 28, 312, FRIEDERICI 272 290, 303, SCHAPIRO 810 237, HAHN 335 19 etc. 3) 638 218. 4) HOGGIN 375 37, Pl. III fig. 1, 386 210, 218, 387 206, WOODFORD 978 133, 984 37, 985 Pl. p. 547, PARKINSON 630 530 f, 540, 631 116, 632 201-204, 640 186, fig. 1 p. 184, fig. 2 p. 185, IM THURN 873 Pl. p. 287 above, COLLINSON 166 46 f, Pl. p. 46, THURNWALD 878 I 538, Pl. XI Nr. 140, BROWN 103 Pl. to face 530, 527, Pl. to face 526, Pl. to face p. 528, 106 532 f. 5) WOODFORD 984 37, HOGGIN 382 164 f. 6) PARKINSON 638 210. 7) PARKINSON 631 115.

respect¹⁾. On Tasman Island, CHINNERY²⁾ found "the remains of what appeared to have been the walls of a stone building. They are called hari aitu" from which it is evident that this also was a temple³⁾. Three feet away was a standing stone 3 feet high and 2 feet wide. The informant told CHINNERY that formerly carved posts also stood within the enclosure⁴⁾. To the west of the hari aitu stood the remains of another stone structure, but CHINNERY gives no further information regarding this.

In the Mortlock Islands, a circular wall, called "sefaiu", "wall", of coral stones about 2 feet high and about 7 feet in diameter was found in the bush. The ground within this wall in which an entrance had been left, was strewn with coconut leaves, and seems to have been used as a resting place for chiefs only⁵⁾.

Mythological evidence. The mythology contains a number of very interesting features which we shall only quote briefly, since here also a comparison with the mythological data from beyond Melanesia would be necessary to determine to which ethnic strata the characters of the myths belong. The theme of the artificial erection of an island appears again in the following story: Lolo (or Aroro) lived on the bottom of the sea, and built up the coral reef so far above water that the waves could not break over it. Then he began to cover the stones with grass, vegetables, bushes, brushwood and finally with trees⁶⁾. Later immigrants arrived from a place called Lalau which, according to WOODFORD, points to an eastern or south-eastern direction. These immigrants brought the taro. Later still other immigrants came from Lalau⁷⁾. There were three men and the woman Kertuahine who was married later by Lolo. These immigrants introduced coconuts, taro, tattooing, the producing of fire by friction, and the use of the loom. Their descendants later settled on Sikaiana, the Mortlocks and Nuguria⁸⁾. With regard to the period when these ancestors existed, PARKINSON records the following data: Lolo was the first chief; his two successors were Ai' Ari'I and Pui Makua, the latter being the last of the

1) HOGGIN 387 208 f, PARKINSON 631 115. 2) 2) 146 81. 3) See: PARKINSON 630 539, HOGGIN 375 32 etc. 4) PARKINSON 630 fig. 85. 5) FINCH 238 III 338. 6) Regarding the myth of an octopus which created Ontong Java, the Tasmans, Sikaiana, the Mortlocks and Nuguria, see HOGGIN 387 210. 7) From Makarama, according to PARKINSON 632 194, who suggests that this name is identical with the name Pikiaram, Greenwich Island; the natives, when questioned about the position of Makarama, always pointed to the north-west where Pikiaram lies. According to HOGGIN, these immigrants came from Ngiua Island which must be situated in the east since, on their voyage to Ontong Java, they sailed for many days in the direction of the setting sun. 8) WOODFORD 984 35-37, PARKINSON 630 521, 632 194 ff, HOGGIN 375 29-32, 387 211-213. It should be noted, however, that the loom, which is known also in Tasman Island, the Mortlocks, Nuguria, Sikaiana, the Reef Islands, Santa Cruz and in the Carolines, but is unknown in the Marshalls, Gilberts, Ellice Group and Polynesia,—see PARKINSON 630 544, 631 117 f, 632 207, 638 217, WOODFORD 985 548, HOGGIN 384 611, 614, etc., induced WOODFORD to suppose that it was introduced from the Carolines—984 33—i.e. from the north-east.

mythical ancestors who are worshipped to-day in the Hare a iku. After this, the chieftainship went over to Kehagomea, then to Wio and after his death to Wio's son Keolapai, then to Keolapai's brother Ka'ape'i, and on the latter's death to his brother Mare'o. On the death of Mare'o, there arose a long quarrel about the succession, but some time later they agreed that Haremaku should succeed to the chieftainship. After the death of Haremaku he was followed by his grandchild Kauraho who on his death was himself followed by his son Uila, and this man was the chief at the time of PARKINSON's sojourn on the island¹). The time of the coming of Lolo cannot be definitely determined from this genealogy, since, in many cases, it was the brothers who succeeded to the office of the chief. Furthermore, break in the succession was probably caused by the quarrel, and we have no means of knowing how long this rupture lasted. According to these genealogies, however, Lolo must have existed at least nine generations ago. In the case of a culture such as that of the stone-using immigrants, which has influenced so many regions of the Pacific, it is only to be expected that some of the mythological themes which we have attributed to this culture appear so far beyond Melanesia.

Shortland Islands and Buin: In Buin two groups can be discerned differing completely in race, language and culture, viz. the original Buin population whose language is Papuan²), and the Melanesian Mono-Alu immigrants. These latter started from Mono Island to conquer the other Shortland Islands not earlier than about 1860, and they also invaded Buin whence they migrated along the eastern and western coast of Bougainville. These Mono-Alu colonies are therefore to be found on the west coast in Empress Augusta Bay, and on the east coast in Toberoi, Popoko, Rorowan, Numanuma, etc. and perhaps also on Carteret Island. They came even to Buka, Nissan, Aneri, Tanga, etc. These Melanesian Mono-Alu became the present chiefs in Buin³). The history of the Mono people can be traced back even further. According to tradition, Mono Island was peopled by immigrants from Roviana who came via Vellalavella, Choiseul, Fauro and Alu to Mono Island⁴). It is, also possible, however, that one

1) PARKINSON 632 195 f; PARKINSON furthermore mentions a man Uila, the mythological ancestor of the common people, who with five women came from the sky. 630 522. 2) THURNWALD R. 878 I 214, 880 227, 881 101, 109, 883 517, 888 119, 889 312, THURNWALD H. 891 18, WHEELER 934 41, 936 26, RIVERS 725 II 465, FRIEDERICI 272 306; with regard to the Papuan languages of the Bougainville tribes Oiai, Nasioi, Telei, Nagovisi, Evo, Kongara, Motuna, Baitsi, Koromira, and the Papuan elements in the languages of the Maré, Okata and Koianu see: FRIZZI 273 2, 3, 274 2, 275 485, CHINNERY 145 71, 73, 79, 87, SCHMIDT 826 207, THURNWALD R. 883 513, etc. etc. 3) THURNWALD R. 878 III 3, 18, 48 ff, 67 f, I 214, 232 f, 385, 490, 881 101 ff, 107, 883 513, 515 f, 517, 525 ff, 888 133, THURNWALD H. 891 9 f, NEVERMANN 611 138, 613 6 f, WHEELER 933 63, 935 64, 936 24, 33, 46, 55, 326, 352 Note 1, RIBBE 714 170 f, 232, PARKINSON 630 459, 633 2, FRIZZI 273 3, 274 2, CHINNERY 145 69. 4) THURNWALD 878 I 87, 378, 881 105, 883 529.

wave of these Melanesian invaders reached Buin direct, that is earlier than those who came to Buin after the conquest of the Shortland Islands. HILDE THURNWALD is therefore of opinion that the first invasion of the Solomon Islanders into Buin took place about 200 years ago¹⁾).

In Buin, THURNWALD discovered a large quantity of stone-work which can be divided into three types²⁾: 1) Dolmen-like structures comparatively very small in size consisting of large stone blocks supported by six basic stones. Little blocks were supported by three or four basic stones only. The covering stones vary in size considerably. Some are huge cube shaped blocks of 70 or 80 inches in each dimension. Some resemble rough stone plates of about 60 inches in length and 30 inches in height, others are small, some 30 inches by 30 inches, etc. They are never hewn, or bear any other trace of human workmanship. Those which are longitudinal are found lying mostly in an east-west direction. 2) Monoliths standing erect and sometimes bearing traces of human sculpturing, either in the shape of a prism or a rectangle; in one or two cases the profile of a face could be guessed. One of these monoliths bore the name 'te-nkari', "they set it up" or "the set up". 3) Comparatively small stones of a few inches in diameter arranged in a circle or oval "associated with traces of cremation. They are apparently of no great age", says THURNWALD. From the character of these stones and from the fact that Buin is an alluvial plain composed of sand and gravel, it is evident that these stones had been moved by human effort to their present position. It is a significant fact that fewer of these stone-works are to be found on the slopes of the mountains although the material is available here.

At the boundary of the two Buin regions Morou and Bagui, there is a "group of stones"³⁾ beneath which, according to tradition, the mythical chief Cikinue of Bagui is said to be buried. This fact, as THURNWALD rightly points out, is all the more striking since the dead are now cremated⁴⁾. THURNWALD made excavations beneath a few dolmens about which he gives the following record⁵⁾: "A few inches beneath the surface I found remains of nut-shells, round objects like throwing stones, and broken pottery. Somewhat deeper, a few inches more, human bones in an advanced stage of decomposition were discovered, together with broken stone implements, crude axe blades" etc. "The position of the human remains shows that the body had not been buried as a whole. The bones were lying in a jumble, not arrayed like a full skeleton. No skulls or teeth were found ... I recalled", says THURNWALD, "that in Bambatana (island of Choiseul), Roviana, Simbo, etc., the body of the deceased is exposed and, after de-

1) 890 214 f, THURNWALD R. 881 107, 883 514. 2) THURNWALD 874 214-217, Pl. I B, Pl. II A, B, 878 I 190, 369 f, 538, Pl. X, 136, Pl. XI Nr. 144, 881 33, 135, fig. 20, 883 518 f, 522. 3) These stones are also frequently mentioned in songs. See THURNWALD 878 I 369, 221 and Note 4 p. 223. 4) THURNWALD 878 I 370, 33 Note 1. 5) 874 216.

composition has advanced, the skull is removed and, together with the arm-bones, is deposited in a diminutive hut, while the other remains are buried in the forest¹). Such a procedure would provide the clue to the manner in which the bones have been found interred under the stones in Buin. — Some of the potsherds recall those of certain areas in south-eastern Asia as exhibited by Dr. Heine-Geldern²). The same is true of the axe blades." This information is of the utmost importance, since this dolmen grave seems to agree with the dolmen grave of the Kabat of Mewun and with that which SUAS discovered on Ambrym. In both of these graves potsherds were found, as in Buin, and we have seen that the introduction of the coiled pottery must be attributed to the stone-using immigrants who were buried in the dolmen. Unfortunately, THURNWALD gives no detailed information regarding these potsherds and their relation to the present-day pottery of this region, and those he has photographed³) are too small to permit of any conclusion. His remark, "the potsherds recall those of certain areas in south-eastern Asia as exhibited by Dr. Heine-Geldern. The same is true of the axe blades" might have a particularly interesting bearing on the megalithic problem, if it were not so general. Are the axe blades of the type HEINE-GELDERN calls „Vierkantbeil"? In view of the fact that the quadrilateral square sided axes of New Guinea, and probably also the axes of the Massim District belong apparently to the culture of the stone-using immigrants, as will be shown later, an exact description of these Buin axes would be of the greatest interest. The objects found by THURNWALD have been handed over by him to the Department of Anthropology of the University of Sydney. An investigation of the objects on the spot would therefore be necessary. In the dolmen graves of Malekula and Ambrym burial in the sitting position has been found, and further examples of this type of disposal of the dead were given, thus confirming that it pertains to the culture of the stone-using immigrants. It must be admitted that the position of the bones "lying in a jumble" as found by THURNWALD differs from the sitting position; but it may be asked whether "bones in an advanced stage of decomposition" belonging to a body which had actually been buried in the sitting position would not easily give the impression of lying "in a jumble". In so many cases the removal of the skull has been found to be connected with recent burial in the sitting position that this point raises no difficulty; but the whole question needs to be cleared up definitely.

After having recorded the stone-work of Buin, THURNWALD continues by saying⁴) that numbers of similar stones are to be found in the neighbouring territory of the Siwai or Motuna tribe west of Buin, but he gives no details.

With regard to the Shortland Islands we dispose of little and often not

1) See also the data mentioned before. 2) 349. 3) 874 Pl. I A. 4) 874 216.

very clear information about stone-work. Following his record of the stone-work of Buin, THURNWALD adds: "The Shortland Islands, Alu, Fauro, Mono, harbour many stones of the same kind"¹). THURNWALD further mentions a "basilisk stone" on Fauro Island, adding, however, "I could gather no further information other than that it is a big stone"²). It is not clear from this information whether a monolith is meant, as those found in Buin.

In Fauro Island, RIBBE found a big stone monument in the sea which had been erected for a dead chief. This monument, which had been built up upon the dry reef during low tide is a rectangular heap of coral stones, 13 feet 4 inches long, 10 feet high, and 6 feet 8 inches broad. The enclosed

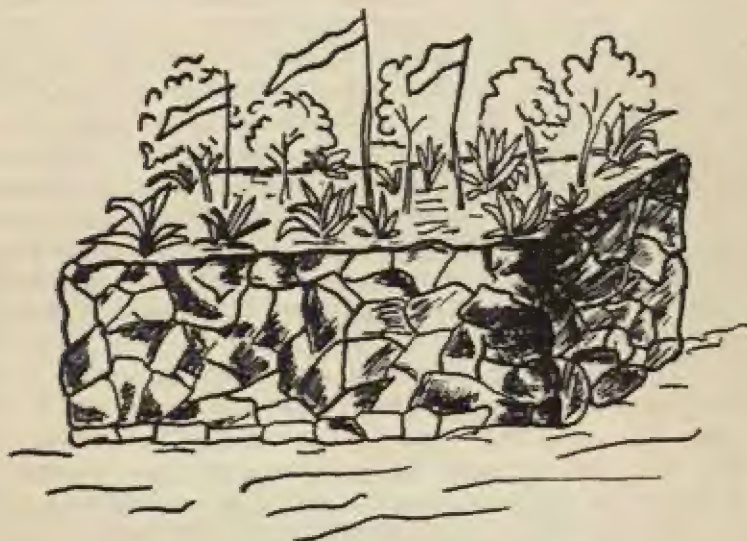


Fig. 13. Chief's grave in Gisu (After RIBBE 714 65)

space is filled with sand, earth and the ashes of the cremated dead³), and various plants are planted on it. On a few little stakes rags are fastened⁴).

From this information it is clearly evident that this "chief's grave" agrees with the cubical stone monuments of Choiseul, where, it is natural to suppose, their purpose was identical, in spite of THURNWALD's information that the stone cubes were erected at the spot where a meteor had fallen. Cremation is also usual in Choiseul⁵) and the not very conspicuous disposal of the ashes may have escaped THURNWALD. I consider it to be quite possible that these stone monuments represent something analogous to the artificial islands which, as we have noted, were in some cases con-

1) 874 217. 2) 878 1 115. 3) To-day cremation is usual for chiefs. RIBBE 714 102 ff. 4) RIBBE 714 49, 59, 65, 114, fig. 15 p. 65. 5) See THURNWALD 881 131.

nected with burial. If this were also the use to which the "bastions" of Santa Cruz were put this would account for their relative small size which does not differ greatly from that of the "chief's grave" of Fauro Island. With regard to the disposal of the dead, GUPPY gives the following information concerning the islands of the Bougainville Strait in general ¹⁾: "The bodies of the chiefs ... are usually burnt and the ashes are deposited together with the skull and sometimes the thigh-bones in a cairn on some sacred islet". Perhaps the "sacred islet" of GUPPY is identical with the big artificial stone heap mentioned by RIBBE. On the summit of Oema Island, north of Fauro, GUPPY ²⁾ came upon a heap of stones under which was supposed to be the remains of a Bougainville native killed in a fight, but he failed to find any of his bones after examining the heap. The "regelrechte, ja sogar mit einer urwüchsigen Art von Grabsteinen geschmückte Kirchhöfe" which ZÖLLER ³⁾ mentions having seen in "Bougainville", are apparently identical with the monoliths mentioned before.

Regarding the Nasioi, who have a Papuan language ⁴⁾, but who, to a lesser degree, were also influenced by the Melanesian immigrants of the Shortland Islands ⁵⁾, BURGER ⁶⁾ records: "In the centre of the village-place lay a block of granitic stone. One of my companions wanted to sit down upon this stone, but was prevented from doing so by the village people. This granitic block, which I have found in all the Nasioi villages, was held to be sacred (tabu) and it was forbidden to use it as a resting place." Was this granitic block a monolith?

Sacred Plants. The information on this subject is not very abundant and is wanting in botanical precision. The data regarding the Shortland Islands and Buin can be treated at the same time. After the burning of the body of a chief, the remaining bones are buried, and "a bright leaved plant" is planted at the burial place ⁷⁾. According to THURNWALD ⁸⁾, the ornamental shrubs called "imi", "der rotblättrige Erdbebenstrauch", are planted at this place. In the case of earth burial, "cuttings of a bright leaved plant, diri, were planted" on the grave ⁹⁾, which, I think, must be the dracaena so often come across under the name diri, dili, siri, etc. With regard to the Nasioi we are told that in most of the villages are small unfenced rectangular plots enclosing coconuts, crotons, and other coloured shrubs. These are known as date. They are erected after cremation, and the shrubs grow until removed in a special dance ¹⁰⁾. In the Shortland Islands and Buin the "imi" shrubs are used in black magic and are also planted at the four corners of the houses. The "Krächzerstrauch" (uguamo), and the "Eberhauerstrauch" (ranabunke) an ornamental shrub which,

1) 314 51 f. 2) 314 52. 3) 989 334, 990 11. 4) FRIZZI 273 3, 274 2, 5, SCHMIDT 828 207, CHINNERY 145 71. 5) H. THURNWALD 890 216. 6) 113 187 and fig. p. 196. 7) WHEELER 935 70; PARKINSON 633 9 speaks of "ornamental shrubs and flowers", and ZÖLLER 898 334 of "ornamental plants" (Zierpflanzen). 8) 878 433, H. THURNWALD 891 53 f. 9) WHEELER 935 79. 10) CHINNERY 145 73.

however, does not grow in the forest, are also planted near the houses; the paths in the vicinity of a village are often planted with "variegated ornamental shrubs" ¹⁾. Furthermore, the existence of *erythrina*, *croton*, *casuarina*, *evodia*, *cordyline* and *dracaena* is mentioned ²⁾, but no indication of their use is given.

Prehistoric objects. In the Shortland Islands, BERNATZIK ³⁾ mentions old stone bowls which are neither made nor used to-day. In a myth of the Papuan-speaking Motuna in whose region stone-work similar to that of Buin was found, mention is made of the use of a stone mortar and stone pestle ⁴⁾. PARKINSON also records from Bougainville Island that stone pestles are still used to-day for the crushing of nuts, but he does not specify the locality. He gives pictures of two of these pestles ⁵⁾.

Mythological evidence. Many stories are told about the megalithic stones of Buin. One of the stone-works of Buin ⁶⁾ is named "tabue ipiro", "Tabue's stone heap", which means that it was erected by the mythical being Tabue, about whom the natives said: "he no man true". Of one of the upright monoliths they said: "Man he no make him". Wit regard to one of the dolmen-like stones ⁷⁾ it was said that he breaks into the gardens at night in the shape of a pig. A story runs that another block of only 15 inches by 19 inches by 15½ inches (the shape of this stone is not stated by THURNWALD) used to want white pigs as sacrifice, later it wanted black and then brown pigs and finally white pigs again. The people, irritated with the stone's moods, cut it across the middle, so that the stone shrank. Of some of the groups of stones, the natives said that it was Kugui and Tanutanu who erected them ⁸⁾. This information is of particular interest for us, since it will follow from the myths of the Shortland Islands and Buin that Tanutanu, Kugui and other characters agree in all essential features with Qat, Ambat, Tagaro etc. thus showing that they represent the same stone-using immigrants as those we have come across in the other regions mentioned so far. Since the myths are known mostly in the whole area of the Shortland Islands and Buin, we shall not indicate in the following their respective origin.

Bego Tanutanu (Bego the Maker) ⁹⁾ who lived at Alu went over to Fauro. There he made a reef. Then he came back to Alu. He left his footprints in Fauro which are still to be seen there. Twice he went back to Fauro making a river there and pulling up reefs. Bego was in a canoe which he

1) H. THURNWALD 891 193 f, R. THURNWALD 878 I 90, 100 f, 433, 883 524, 889 316.
2) THURNWALD 878 I 537, GUPPY 314 283, 289, 295 f, 300, 302, 305, SAPPER 754 212.
3) 70 60 f. 4) CHINNERY 145 103. 5) PARKINSON 630 497, 498, fig. 79, 633 24, quoted also by FINSCH 236. 6) Probably one of the stone-circles, but THURNWALD's information is not quite clear on this point—he speaks of "a heap of small stones", 878 I 369. 7) The supporting stones in this case had been removed for some reason so that the following would seem to apply only to the covering block; THURNWALD 874 215. 8) THURNWALD 878 I 190, 370. 9) tano = to make, WHEELER 933 30.

pushed along; wherever he put his stick reefs came up. When he came back to Alu the men were cutting up pigs. "Turn into stone" said he, and the people and pigs became stones. One of these stone pigs is called Olavoko. This is the name of a rock by the sea. It is a group of very big igneous rock, some stones piled on others; the piece at the top is the pig, the two pieces which carry it are baskets with food inside. The other rocks are likewise baskets with food, made by Bego. All differ completely in character from the ground there about, which is coralline. Then Bego paddled over to Buin. There he fought with the nitu (spirit) Funiki for Sameai, a district in Buin. Funiki hit Bego on the shoulder and drove him away. Then Bego made the hill Patupatui by the sea in Buin to hide himself. "You are not yet hidden", said Funiki. Bego went on and pulled out Moaila, a point on the south coast of Buin, and this hid him. Bego walked along the shore westwards. At Roai, the nitu Kokoapai was wrathful with Bego for staying in his place. They fought, and the nitu broke Bego's clay cooking-pot. Bego went on and came to Papara, a place in S. W. Bougainville. Some children asked him to make their place fruitful. "We are dying of hunger", said they. He then produced a basketful of cakes of taro in coconut oil, pig, fish, opossum, and pudding¹). They went to their mothers. "Throw away that wild yam" said the children, "Bego has produced food". Next day Bego went inland. He spat, and bananas and taro came into being, which the people ate and had no need to toil. After a time Koriomu, a nitu belonging to the bush, was deserted by all his people, who went to Bego's village because of his food. At last Koriomu came to Bego's place, saying that he was a Maker and not Bego. So they went through a stone cooking ordeal to see who would get cooked and who not. Koriomu died, but Bego came forth as food. The people of Buka, Tauposa, and Burue ate Koriomu. These are all places in North Bougainville whose inhabitants are cannibals; the people of Alu, Mono, Fauro and Buin who are not cannibals, ate the pig's flesh. Gardens came into being: taro, bananas, yams, and sago palms. Bego also made fresh water. He became taboo: he became chief²). When Bego Tanutani³) still lived in Kule on the north-east coast of Alu, he stood upon a stone on which, it is said, the traces are still to be seen where he spit his betel nut. First he created Alu, Fauro, Choiseul, Buin, etc. and when they were finished he ordered them to go away. When they had each reached a certain distance he ordered them to halt, thereupon the islands stood still. One rock continued to drift farther away although he wished to place it quite near to Alu. To punish it for this he left only a little

1) For a similar version regarding the introduction of taro and yams by Bego see: THURNWALD 878 I 394 f. 2) WHEELER 933 7-10, 936 338-347, THURNWALD 878 I 413. 3) THURNWALD, by whom the following version is recorded 878 I 410-412 (similar WHEELER 936 344) writes "Tantani", RIBBE who represents him as the creator of the world and man, writes "Tonatona", 714 148, and BROWN 192 210 calls him "Tonutonu".

hurnus on this rock, but left a great many stones. The sea surrounding it he made very deep so that no fish could be caught there, and the land cannot be easily approached. This rock was Mono Island ¹⁾. Then Bego made the fish. These he kept in a big chest, and his servant, the old woman Kikoraka, took them out of this chest, with birds and other animals also. But whilst he was chewing betel nut he failed to notice that some of the fishes destined for fresh water went off into the salt water. This made him very angry, and he stamped his foot on the ground leaving the traces which can still be seen on the rock of Alu. He also created the sun and the moon, the first human couple, and a house. The children of this first couple went to Mono, Fauro, Choiseul, and some of them to Buin. Tanutanu then sent his son Tanutanunatuna after the people who had emigrated, and this son taught the people to make arrows and spears, to build houses, to catch fish, to make tools and also the bamboo flutes. Tanutanu and his son formerly lived on Alu, but then came a heavy fall of rain and both disappeared.

This myth shows that Bego shares the following characteristics of the stone-using culture heroes: He made the reefs, hills, headlands, rivers, and the many islands. He left his footprints behind in the rock; like the Ambat who introduced the coiled pottery into Malekula, he carried his clay cooking-pot with him. He introduced the food plants taro, yams, bananas, etc. and taught the people how to cultivate them ²⁾. The pig and many other things were also introduced by him and he also created man, and the sun and the moon. He is the leader of immigrants whose culture came via the Shortland Islands to Buin, after which he penetrated into the interior like many of the other stone-using immigrants. Here he had to fight against the aboriginal population (nitu), but owing to his higher material culture he gained the upper hand and became chief, as all the other stone-using immigrants ³⁾. The stone-cooking ordeal agrees with the roasting of Puungilalamoa of Saa who, as a result became light-skinned, and who by this roasting later killed his brother who also wanted to become light-skinned by stone-cooking; and in a similar way we have come across this theme in connection with Warohunuga, the Qat of San Christoval, and his brothers. Bego's son teaches the people to make arrows, which weapon we have found in the possession of the stone-using immigrants. And, like the other culture heroes of the stone-using immigrants, Bego also finally departed from the world, and this too happened in a heavy fall of rain as in the case of Qat of the Banks Islands, who also caused heavy rain in which he finally departed from the world. THURNWALD adds to his record regarding Bego: "After this the people received nothing new. Only when the white man came did they again receive new things" ⁴⁾. Unfortunately, nothing is

1) See also: THURNWALD 578 I 348, WHEELER 933 10. 2) See also THURNWALD 581 134. 3) Regarding the migration of Bego within the Buin District, see: THURNWALD 578 I 334-336. 4) THURNWALD 578 I 412.

recorded regarding the racial characteristics of these stone-using immigrants, and we do not know whether they were light-skinned. But that they are really identical with the numerous stone-using immigrants of Melanesia who have come to our notice up to the present will be further confirmed by the following stories.

This is how the sea was made (Buin version): Snakes were cut up and put into a pit, where they rotted and became sea water. An old woman, whose husband was Bego, used this water for her grandson's food. Once in her absence they looked inside the house where the pit was and poured out a little of the water. When the old woman saw this she swept the water in different directions and so arose the sea¹). This agrees with the story of the creation of the sea by an old woman in Epi, Fate, Aoba, Maevo, Tanna, etc. That this theme belongs to the culture of the stone-using immigrants is borne out by the fact that the analogous woman who in Tanna created the sea is the wife of Tangalua, that the pool from which, according to the Maevo story, the sea originated was behind Tagaro's house, and that the sea water, according to the South Pentecost version, was given to Barkulkul and his brothers by the wife of Barkulkul. The fact that, according to our present story, Bego is the husband of the woman who created the sea, affords additional proof of the identity of Bego with the stone-using culture heroes Tagaro, Tangalua, etc.

The following data will show that Kugui who, as mentioned, was one of the builders of stone-work, really belongs to the stone-using immigrants. Kugui has a younger brother, Okeru. Both are the chiefs of the afterworld. It is significant that "Kugui" is the name given generally to the people of olden times, the heroes, to whom is attributed the creation of culture. Kugui is said to be the creator of rain, the sea, and water in general, and he also created the coconut, taro and the pig. He invented the wooden drum, and is also the creator of the sun²). Kugui's mother, Atoto, lived in her son's house. Formerly water was unknown. Atoto cooked the food with her own urine which she collected in a pit she had made in the ground. When Kugui once discovered her, he beat his mother for this. Then he broke all the pots and poured out the liquid they contained. This inundated the country and thus originated the salt water of the sea. Men are the sons of Kugui, and the trees sprang up from his excrements. He also made the stars. Pots, however, were invented by Bego Tanutanu. Kugui had a wife, but he was ignorant of normal intercourse and knew only of her armpit. Once Kugui ordered his wife and his younger brother to gather betel nuts. When

1) WHEELER 933 10 f. 2) THURNWALD 878 I 317, 319, 394, H. THURNWALD 891 15; another myth relates the origin of the coconut in the following way: two brothers kill their mother, burn her and bury the bones. From these the coconut springs up. Because in this myth the coconut appears in close connection with the dog and the pig, THURNWALD draws the conclusion "that it is intended by this to express that the coconut came into the country with the dog and the pig", 878 I 399-402.

the woman climbed the palm, Okeru saw her genitals and had normal intercourse with her. The woman informed her husband of his brother's discovery and from that time they had normal intercourse. But Kugui was very angry with his brother and ordered him to climb a tree. When Okeru is up in the tree, Kugui tears away the aerial roots, so that Okeru cannot descend again. So he calls the wind to blow through the tree, and when the tree bends in the wind Okeru snatches hold of the branch of another tree and descends. The two brothers fight, and after wounding each other they separate. Therefore, the myth adds, all those who are killed in battle go to Okeru, and those who die a natural death go to Kugui¹). In the version recorded by WHEELER²), Kugui tries to revenge himself on his brother in the following manner: He took his brother out in a canoe, let him dive for a coconut which he threw overboard, and then paddled on and left him in the water. Okeru was swallowed by a man-eating fish, but cut his way out with a shell. He came back to his village, killed his brother and married his widow³).

An analysis of these myths establishes that the culture heroes and creators were also the chiefs of the country of the dead, an opinion we have already come across on several occasions: thus Takaru of Malo ruled in the sky afterworld, and Tokotaitai, the creator in Malo, ruled over the underworld, and on Santo the afterworld was on the mountain "Takar". Too much stress must not, however, be laid upon this point which, considered independently, would not afford sufficient proof. But Kugui appears here again as a culture hero who, like Bego, introduced the taro and the pig and also created the sun; and, characteristically too, the introduction of the coconut and other trees is also attributed to him. We have already given many reasons for the opinion that the coconut and the pig in particular were introduced by the stone-using immigrants. The origin of the sea out of the pit made by Kugui's mother is a slightly modified version of the Bego story of the creation of the sea, a story, the connection of which with the stone-using immigrants has already been discussed. The quarrel of the two brothers Kugui and Okeru, because of Okeru's adultery with Kugui's wife (here identified with the discovery of normal intercourse) is strongly reminiscent of Qat, whose brothers envy him his wife and therefore try to kill him in various ways; similarly Barkulkul of Pentecost kills his brother because of the latter's adultery with his wife, and the Ambat brothers also try to kill Ambat, as the youngest brother wishes to possess Ambat's wife, whom, according to one version, he actually seduces, upon which all are killed in the ensuing fight. The attempt to kill by climbing a tree from

1) THURNWALD 578 I 323 f, 347 f. 2) 933 41. 3) A similar story is recorded of Porana of Alu Island. He is also the first to have normal intercourse with a woman whose husband knows only of her armpit and her ear. He introduces normal intercourse, but is killed by the angry husband of the woman. See: THURNWALD 578 I 417, WHEELER 933 42 f; for Porana see later on.

which descent is not possible may probably be a variant of the lengthening of the tree by which the brothers try to kill Qat in the Banks Islands, a theme we have found likewise in connection with Warohunuga, the Qat of San Christoval, and also with the "Delectable Lizard" in Saa, as well as in some other cases in connection with the stone-using immigrants. As Okeru saves his life by the bending of the tree, so Qat bends his casuarina so as to reach Venua Lava to escape from Qasarava; the identical Warohunuga of San Christoval also descends from the tree which his brothers had lengthened, by bending it, and the "Delectable Lizard" similarly bends the rainbow. The swallowing by a man-eating fish and the escape appear here again as in the stories of the other stone-using immigrants Warohunuga (San Christoval), "The Delectable Lizard" and "Born by the Side of a Bow" (Saa), Vulcanangela (Malaita) and Kamakajaku (Isabel). Furthermore, it is very probable that the diving for the coconut by which Kugui tries to kill his brother Okeru, is only a variant of the clam story of the stone-using immigrants Ambat, Warohunuga, "The Delectable Lizard", Mosigsig, etc. This theme of the clam shell appears moreover in another myth according to which some children (a group of brothers?) cooked a giant clam which they had caught, telling a nitu which wanted to kill them (this in itself is reminiscent of the ogre stories of Qat, Ambat etc.) that they had got it by diving and putting their heads inside the shell. The nitu dived for the shell and it cut off his head ¹).

Now another character must briefly be mentioned: Soi. He was an orphan who was despised and insulted by the others. For a canoe race the people once made canoes caulking them with clay, and making the lashings from the fibres of the wild banana. Soi, however, on the advice of his grandmother, took a resinous substance and the proper lashings of root fibres. In the race, the canoes of the others broke, but Soi's held and the men took it for themselves. In a similar way the others made nets from banana fibres. Soi, however, made his from hibiscus fibres. Whereas the nets of the others were torn, Soi's net withstood the strain, upon which Soi revealed his secret to the others. Once, when fishing with the others, Soi held the canoe while they were away, but catching a fish he let the canoe drift away. The men swam off to get it again, but all got eaten by sharks. The sharks came to him, spoke to him kindly and took him back on their backs to the village. Soi then killed many pigs for the sharks, and promised that his descendants would never attack them. Thereupon the sharks promised to help him always ²). THURNWALD, as well as WHEELER, is of opinion that Soi must be an immigrant who brought better methods in the canoe and fishing crafts. It will be noted that the story of the canoe race in which the canoes of the others sink, agrees with the canoe race of Qat and his brothers, and is similar also to the story of the creator Lata

1) WHEELER 933 60. 2) THURNWALD 878 1 413-416, WHEELER 933 16-18.

of Santa Cruz. Soi's relation with the sharks is accordingly significant, and it may be that Soi is a stone-using immigrant one of whose characteristics is, as we have seen, the worship of sharks. These proofs are somewhat scanty, however, and further information is needed.

Besides Soi, Bego, Kugui, and Okeru there is one more important supernatural being in Alu called Bunosi, in the story about whom a migration of culture is described. A woman had a girl-child called Kafisi; then she brought forth a snake, Bunosi. She covered it up under a basket, but when she went to the garden Kafisi lifted up the basket and the snake uncoiled. When their mother came back she reprimanded the two so that they wept, and went off, Kafisi sitting on the back of Bunosi. They came to a river in Fauro, sounded the depth, but it was shallow. Then they came to a river in Ovau Island which likewise was shallow. Here Kafisi threw away her bamboo comb and a pandanus-palm mat. Bunosi went to Tonolei, a big bay in S. E. Bougainville and then to the river Alania. In Buin he went to the river Biriaiini and then to another river. Here he dived down and found it good, thus ending his wanderings. His sister Kafisi stayed on land. When she wanted fire Bunosi created it and when she wanted food Bunosi called a garden into being. Bunosi further created a chief's house and pigs. One of these, Bunosi called after his mother and himself saying that no one should kill it since it was taboo. But they killed the pig and therefore Bunosi vanished. Bunosi made Lafala, a lake in Buin, and Biriaiini River bigger by wriggling about in them. WHEELER rightly concludes: "This evidently is a wandering from Fauro to South-east Bougainville... The wanderers carry a culture with them; the bamboo comb and the pandanus mat are mentioned. Bunosi, the snake, has the power of making food, pigs, a garden, a... chief's house, fire and various things; or in other words introduces them into S. E. Bougainville"¹). That Bunosi tries certain rivers and finds them too shallow suggests, according to WHEELER, that the voyage was made in canoes. The fact that these immigrants went along the same way via the Shortland Islands to Buin as the stone-using immigrant Bego, that they also introduced food plants, pigs and other things, furnishes sufficient reasons for seeing in them the same stone-using immigrants to whom Bego and Soi belonged. To a certain extent Bunosi is also a topographical shaper, as he made the lake Lafala and the river Biriaiini bigger by wriggling about in them. WHEELER²) has rightly remarked upon the similarity between the snake Bunosi and the figona serpent Hatuibwari of San Christoval, and the same likeness exists also with the figona snake Walutahanga of South Malaita and Ulawa. The points of resemblance are: that all three created or introduced food plants and pigs; and all three wandered to various places—Hatuibwari to Ugi, Ulawa, Malaita and S.E. Guadalcanar—Walutahanga to Malapa, Florida, and Langalanga—and

1) WHEELER 933 13-16, 936 348-351. 2) 933 15 f.

Bunosi from Alu to Fauro, Ovau and then to Buin. The origin myths of Bunosi and Walutahanga also show certain resemblances¹⁾. The reprimand of the mother as the cause of the departure of the snake and its sister is apparently only a variant of the killing of the snake, an insult which caused Hatuibwari and Walutahanga to leave²⁾. We have shown the connection of Hatuibwari and Walutahanga with the stone-using immigrants; their identity with Bunosi is therefore further proof that the latter is also a representative of the stone-using immigrants. This moreover is established by the fact, to which WHEELER has drawn attention, that the names Ka-hausibware (a variant of the name Hatuibwari), Koevasi (the woman of Florida and Guadalcanar whom we have seen to be a representative of the stone-using immigrants) and Kafisi, the sister of Bunosi, "have a very strong likeness"³⁾.

Oromutui, a mythological character of Buin, shows strong similarities with Bunosi; he assumes the shape of a snake or a man as he pleases; he also introduced taro, yams, and bananas⁴⁾.

The following myth of the Shortland Islands probably belongs to the myths of the stone-using immigrants: There were two brothers, chiefs. The younger climbed up into the sky (how he did this it is not stated). There he saw a river and climbed a siing tree (a tree of the fig family, as WHEELER explains). He married two chief's daughters whom he met in the sky. He taught them to make fire and to cook food. When the elder sister became with child, the man refused that she should be handled so and the child was born normally. Finally the man and his wife went down a long rope to the earth. He and his brother let themselves be stone-cooked; the younger with the help of his magic from the sky was not killed thereby, but the elder was, and was eaten. The younger became a great chief⁵⁾. Here we have again the characteristic theme of the ascension into the sky of a man who is said to be a chief, as in the many other stories mentioned. The stone-cooking which is also associated with Bego, agrees here more closely still with the version of Puungilalamoa of Saa, who also kills his brother in this manner after having descended with his sky-woman from the sky; and the stone-cooking theme has further been found in connection with Warohunuga, the Qat of San Christoval. The cutting of the children out of the womb of their mothers is, according to this story, characteristic of the sky-people—a practice which here is changed by the man who ascended to the sky. We have found a similar story in connection with the man of Santa Cruz who ascended to the sky; in the analogous form in the Eddystone story of the cutting asunder of the limbs in the mother's womb; in connection with the creator

1) See Fox 263 94. 2) For similar themes in Maevo, Hiw, and Epi, see: DURRAD 205 III 197 f, Fox 263 83, RIDDLE 718 162 f, CODRINGTON 160 404-406. 3) WHEELER 939 16. 4) WHEELER 933 11, THURNWALD 878 I 83, 88 f, 337-339, H. THURNWALD 891 11, 36, 196. 5) WHEELER 933 54.

Vanavana; and again, in connection with the sky-being Yetar and Tautai of Santo and the children of the sky-woman, Karisibum and Makosavaki of Fate. It is to be regretted that we are not told whether the stone-cooking rite here was also for the purpose of obtaining light skin, as in the case of Puungilalamoa¹).

Among the Nasioi, in whose region stone-work was seen to be not improbable and who also knew the ritual use of certain plants, the myth of Tanutanu is also known, but Tanutanu is the wife of the creator god Kumponi. Kumponi has all the essential features of Bego and of the other stone-using immigrants, and there is no doubt that he is identical with them. Kumponi is said to have made from stone a certain number of models, thus for instance a model of a canoe, of a pot, an armring, and taro. In the forest there is a rock on which his footprints can be distinguished. Kumponi himself, hewn in stone, is found on the summit of a mountain. Other stones nearby are his wife and his children. Kumponi is the creator of mankind. With his wife Tanutanu he finally left this region and emigrated²).

The story of the adultery of Kugui's wife with his brother Okeru is known here too, and agrees in numerous details. The names of the characters are Baitsinani, his wife's name is Bari and the name of the adulterer brother is Tebu³).

In the Motuna tribe which has the same stone-work as Buin itself, there are similar mythological characters also, but under different names. Our knowledge of the myths associated with this tribe is, however, somewhat scanty. Many of the present arts and industries are said to have been discovered by Panaga. Formerly childbirth was effected by cutting open the body of the mother and taking her child away, a method which killed most of the mothers. Panaga, who did not want to loose his wife, changed this by leaving the birth of his child to nature. Panaga also introduced the building of houses, the use of the wooden gong, the making of cooking pots, and he was the first man to commit adultery⁴).

In the introductory discussion on Buin, it has been shown that the immigration of the black-skinned Solomon Islanders to Buin took place about 1860, but it is not improbable that earlier immigrants came directly to Buin about 200 years ago. With regard to these black-skinned Solomon Islanders, HILDE THURNWALD says⁵): "They brought with them shell-money and pigs, probably also the coconut and one or other variety of the yams, etc.". RICHARD THURNWALD expresses the same opinion, but is more cautious. Basing himself upon the fact that the chiefs claim for their class the ownership of pigs and shell-money in Buin he asks⁶): "Are we justified in suggesting that in the region in

1) For a further sky-ascending story see: WHEELER 933 53. 2) FRIZZI 273 8-10.
3) FRIZZI 273 6. 4) CHINNERY 145 102 f. 5) 891 3. 6) 888 125.

question (Buin) pigs and shell-money were introduced by the people who claim their ownership?"¹⁾ But as far as I can see, not the slightest mention is made in the myths that it was the immigrating black-skinned Solomon Islanders who introduced these things. The introducers of pigs, coconuts, yams, and other things were, on the contrary, Bego, Kugui, Bunosi, Oro-murui and other immigrants. From this it follows that HILDE THURNWALD has identified these culture heroes, whom we have found to be representatives of the stone-using immigrants, with the immigrating Solomon Islanders. But such identification must be completely rejected. Even if we accept the earlier date of 200 years for the immigration of the Solomon Islanders, which, however, is not even certain—the only migration which, chronologically, can with certainty be determined being that which took place in 1860—such a recent date could in no circumstances be accepted for the immigration of the stone-using immigrants Bego, Kugui, Bunosi, etc. in view of the date of their migrations in the other parts of Melanesia. It is true that the information at our disposal does not tell us precisely whether the stone-using immigrants of this region were light-skinned, but their strong resemblance to the light-skinned stone-using immigrants of the other parts of Melanesia makes it most improbable that they were black-skinned like the present Western Solomon Islanders. That they actually were light-skinned is further supported by the fact that the analogous stone-using immigrants of Buka and North Bougainville are said too to have been light-skinned, as we shall see later. It may further be mentioned that Bego lived in Alu, and that his descendants, the children of the first couple created by him, went from Alu to Mono, Fauro, Choiseul and Buin, so that Mono was not the starting point of their migration as it was for the migrations of the black-skinned Solomon Islanders; neither did the stone-using immigrants come from the east as did the black-skinned Solomon Islanders. I imagine that the error of HILDE THURNWALD originated in the following manner: THURNWALD notes on the one hand the existence of mythological immigrants who introduced pigs, coconuts, yams, etc. (Kugui, Bego, etc.) and on the other she is aware of the well established immigrations of the black-skinned Solomon Islanders. Basing her conclusions solely on her knowledge of the local conditions, she supposes that both migrations must be identical. But it is indubitable that only a comparative investigation of the whole of Melanesia can lead to any reliable conclusion. We may conclude therefore that in Buin as well as in the Shortland Islands at least three different ethnic groups can be distinguished, appearing in the following chronological succession: 1) the aboriginal Papuan population, 2) the stone-using immigrants and 3) the immigrating black-skinned Solomon Islanders.

In the present race black skin prevails in the Shortland Islands, Buin,

1) The question of the introduction of shell-money will not be discussed here; regarding this subject see the myths recorded by WHEELER 933 18 f.

and the neighbouring coast of Bougainville which had been invaded by the Solomon Islanders. These people, as well as the aboriginal dark-skinned population, have frizzy hair¹). But besides these, Graf PFEIL found on the east coast of Bougainville hair rather long, wavy and very soft, "as soft as silk" as he puts it, and THURNWALD considers it as one of the unsolved problems of Buin "that the black colour of the skin persists, but the shape of the face, the stature, and sometimes the character of the hair also, resemble the Polynesian type". Also in the Shortland Islands beside black skin and frizzy hair, hair was found "which is almost straight, and with small boys often curly with large spirals" and there were also individuals with light brown skin "who resembled those of Malaita Island" whose inhabitants we have found to be the lightest skinned of all the Solomon Islands. THURNWALD further mentions that in the chiefly families of Mono and Alu lighter skin can often be found²). It is impossible that this mixture could have been brought about by the existing trading relations because the following regions have contact through reciprocal commercial relations: Shortland Islands, Buin, Buka, Choiseul, Roviana, not to mention the relations brought about by Gorai who extended his chieftainship over the Shortland Islands, the coasts of Bougainville, Choiseul, and even Buka³). All these, however, are regions of the black-skinned Solomon Islanders. The arrival of light-skinned individuals is in fact not rare in Bougainville and the Shortland Islands to which they had been blown by the wind. The chief Gorai informed PARKINSON of 16 occasions on which light-skinned people drifted over, some of whom remained a long time upon one of the Shortland Islands. PARKINSON was moreover informed of the arrival of light-skinned people on the north-east end of Bougainville, on the little island Tekareu in the south (these latter, according to PARKINSON, seem to have been people from Ontong Java) and in Numanuma⁴). Do these people furnish the reason for the existence of the light-skinned and wavy-haired elements mentioned above? It is evident that to decide this question other anthropological data must be taken into account, but as mentioned in the introduction to this study, data indispensable for a satisfactory comparative investigation of this problem for the whole of Melanesia are still lacking. This applies also to the particular region of Bougainville and the Shortland Islands, with which we are at the moment concerned. We have seen, however, that Bego became chief, which agrees with the fact that the stone-using immigrants in the other regions of Melanesia also seized the right of chieftainship. On the other hand it has been mentioned that the

1) THURNWALD R. 881 101, 888 133, THURNWALD H. 891 3, 30, BLACKWOOD 81 429, CHINNERY 145 101, NEVERMANN 611 7 etc. 2) THURNWALD 883 526 f, PFEIL 656 52, 309, RIEBE 714 51, GUPPY 315 278. 3) THURNWALD 878 I 372, III 39, 881 120, 122, 888 136, 889 351-353, THURNWALD H. 890 218, WHEELER 936 26, GUPPY 314 14, 21, 27, 30, PARKINSON 630 494, 501 f, 640 184, RIEBE 714 59, FINSCH 236 47, 277, FRIZZI 273 51, CHINNERY 145 104 etc. etc. 4) PARKINSON 631 10/ f.

more recent black-skinned Solomon Islanders became the present chiefs. Now, if THURNWALD frequently finds light skin in chiefly families this is an influence which can only be attributed to the stone-using immigrants.

Buka and Buka Passage: It is well known that the inhabitants of Buka and Northern Bougainville, whose skin is almost black and who have frizzy hair, are among the darkest people of the whole of Melanesia. Some individuals, however, have a skin of lighter colour, which is much admired by the people. Curly and wavy hair also occurs and occasionally even straight hair. The noses and the facial index vary considerably. Even epicanthus occurs but is rare, and the cheekbones are sometimes prominent¹⁾. The problem of these light-skinned elements is still more complicated here than it is in the Shortland Islands and Buin, for trading relations (though from what date we have no means of judging) not only exist reciprocally between the Buka tribes and between Buka and North Bougainville, but also with Nissan, Carteret, Tanga and New Ireland²⁾ thus penetrating into the area of the light-skinned Melanesians. Canoes, blown off from Sikaiana, Ontong Java, Tasman Islands, Marqueen Island, Nuguria, the Gilbert Islands and also from the Carolines, arrived in Buka and Bougainville and on Saposa Island. PARKINSON met people who had drifted from the Trobriand Islands³⁾. This afflux might of course explain the existence of light-skinned and straight-haired elements in the region with which we are concerned, but it must once more be emphasized that a solution of this question depends upon other anthropological data and that detailed information is still lacking. Since there is clear evidence of the presence of the light-skinned stone-using immigrants in this region, the possibility of the light-skinned elements of the present population being due to the influence of the stone-using immigrants must at least be admitted. The identity of their Melanesian language, race, and social organization intensified as it is by close contact such as intermarriage in both districts, form of Buka and the northern coast of Bougainville a cultural unit⁴⁾. For this reason BLACKWOOD, in her work *Both Sides of Buka Passage*, treats both these regions together, a proceeding which we shall follow in this study.

In this area BLACKWOOD discovered stones which show definite traces of handiwork, being shaped like pillars and, in some cases, having designs incised upon them. BLACKWOOD examined five of these, and heard of at least two others which appear to belong to the same category. The stone

1) BLACKWOOD 75 207 f, 76 13 f, 108, PARKINSON 630 477 f, 638 245, CHINNERY 146 65, HAGEN 333 158, 161, FINSCH 238 1 147, PÖCH 667 388. 2) BLACKWOOD 75 200 f, 76 16 f, 90, 124, 224, 230 ff, 234, 254, 273, 77 72, CHINNERY 146 63 f, PARKINSON 630 466, 494, 638 231 f, 234, 236, 248 ff etc. etc. 3) PARKINSON 630 477 f, 679, 631 106 f, 633 4, 641 215. 4) BLACKWOOD 75 208, 76 XXII, 15, 77 64, FRIZZI 273 3, 274 2, PARKINSON 630 478 f, SAPPER 755 204, CHINNERY 146 63, etc.



Monolith at Ilupan, Euka (after Blackwood)

PLATE III



Monolith at Tip Island Buka
(after BLACKWOOD)



Monolith at Tehatchi, Buka
(after BLACKWOOD)

pillar at Yame Island off the west coast of Buka was not standing when BLACKWOOD saw it, but prone on the ground. Only a portion of it remains, a length of about 3 feet, the bottom part being obviously broken off. Its diameter is rather less than a foot at the bottom, its widest part. It tapered slightly towards the top, which was rounded. There were no designs on it. No one could tell how it was broken, or what had become of the rest of it. The stone pillar at Itopan on the north end of Buka stands in the bush on the site of a former village. A coconut tree had fallen on it and broken it into three pieces. One piece, two feet in height, was still standing. It was firmly embedded in the ground and seemed to go down for some distance. A second piece, one and a half feet long, lay on the ground beside the upright piece. The top section with rounded end, three feet long, lay with its upper end tilted against the piece lying on the ground. A pattern was incised on both sides of it in low relief. On the east coast of Buka, some four or five miles to the south of Itopan, there is another stone pillar which appears to be unbroken. It stands about $6\frac{1}{2}$ feet high, and is not quite circular in section; its longer diameter measures 12 inches and its shorter 9 inches. The stone has several incised designs, not as deeply cut or as well executed as those on the stone at Itopan, and differently arranged. At Lonahan, still farther down the east coast of Buka, there are the remains of another round pillar similar to the others. It shows signs of mutilation. About $3\frac{1}{2}$ feet of it remains. There is no sign of any incised pattern on it. On North Bougainville coast about half-way between Gomen and Ruri, at a former site of a village there is an uncarved portion of a stone pillar which originally must have been similar to those on Buka. Only a piece measuring $2\frac{1}{2}$ feet is still standing; it appears to be the top section of a pillar, since its end is rounded like all the others. It is said to go down a long way into the ground. One stone pillar was said to be at Raua Plantation, on the coast of Bougainville several miles to the east of Kurtatchi. Another is reported on the west coast of Buka, near the R. C. Mission at Bonotui, but BLACKWOOD personally did not see them. (Among the stones used in rain magic in Kurtatchi, there were "three very large ones, the largest perhaps 2 feet high, standing up on end"¹). Although BLACKWOOD does not mention the association of these stones with the megalithic stone pillars, it nevertheless seems probable, from BLACKWOOD's description and from the photograph which accompanies her text that these stones also were originally monolithic stone pillars). At Tiop Island at the north-eastern corner of Bougainville there is a group of stones which are not pillars, but flat slabs of limestone, apparently unworked. There is no trace of a design upon them. There are two large slabs and two smaller ones. One of the large slabs stands upright, the two smaller ones, also upright, are at its base, the other large slab lies flat on the ground. It seemed to be quite firmly embedded, but the natives could give BLACKWOOD

1) BLACKWOOD 76 313 Pl. 41a.

no information as to whether it had fallen or whether this was its original position. When a child is born to a woman who is of the lineage of the man to whom the stones belong, the child's mother brings the baby to the place, a pig is killed and cut up, and the stones are washed with its blood. In olden days it was customary on these occasions to make a raid into the mountains, bring home a prisoner, eat him and bring his head to the stones with the child: the head was then buried underneath the stones. A short time before BLACKWOOD's visit, fragments of a human skull had been discovered in the vicinity of the stones during some digging in connection with a new building for the Mission. Since the natives professed entire ignorance with regard to the stone pillars, BLACKWOOD is of opinion that the pillars had been set up in times past so that all memory of them has disappeared. One of the missionaries told BLACKWOOD that he understood from the natives that the stones had been put up in times long past as memorials to dead chiefs. But no mention of anything of this sort was made to BLACKWOOD in the course of her extensive inquiries¹). Because of certain ceremonies performed in connection with all these stones²) BLACKWOOD expresses the opinion that the pillars and slabs of Buka and Bougainville may have formed part of a fertility ritual³). In my opinion, BLACKWOOD's conclusion is, however, not at all convincing. From the ceremonies upon which BLACKWOOD bases her opinion and which need not be described here in detail, it is not by any means certain whether their association with the megalithic stone-work is not of a secondary nature. It is true that the second-hand information which BLACKWOOD records, and according to which the stones were memorials to the dead chiefs, is not of great importance if the ignorance of the natives regarding these stones is borne in mind. Nevertheless, in view of the examples quoted in the course of this study it is highly probable that this is the meaning of these stones, and this will, in fact, be manifest from the mythological evidence. It would be desirable to know more about the bones found accidentally and not by an expert near the stone slabs on Tiop Island before BLACKWOOD's visit to the spot. BLACKWOOD does not seem to have examined these finds.

BLACKWOOD gives the following information regarding stone walls of the Buka Passage⁴): "Most villages are fenced except where they face the shore. In the beach villages the fence is made of stones and chunks of coral rock, in the cliff villages of saplings put in green and left to grow. It does not seem to be a survival of an old stockade, but a recent innovation, erected at the instance of the Government with the idea of keeping the pigs away from the dwellings".

1) BLACKWOOD 76 531-540, Pl. 77a, b, 78, 79a, b, 80, 75 219. 2) For these ceremonies see: BLACKWOOD 76 538 f. 3) 76 540. 4) 76 21.

Fishing of bonito is of great importance¹). Much magical procedure is involved in fishing of all kinds, but especially in bonito fishing. Only men catch bonito. "The older boys take part in it while still wearing the upi (the initiation hat), but I did not hear of any ceremony corresponding to the "making malaohu" ... in connection with a boy's first fishing expedition", says BLACKWOOD²). We thus recognize the extreme limit to which the malaohu ceremonies have extended; we have shown the connection of these rites with the stone-using immigrants in the Eastern Solomon Islands. Real shark cult does not exist here, but in Kurtatchi some ghosts are believed to become snakes, crocodiles and especially sharks³).

Sacred Plants. *Coleus Blumei* var. (iag) is grown in taro gardens, since it is supposed to ensure a good crop; the leaves are used in the ceremonial of betrothal which perhaps has reference to the bride's future fertility; the leaves are also used in magic to prevent sunstroke, and in the ceremony for a pregnant woman. *Coleus* sp. (munte) leaves are used in magic to induce sleep. Leaves of *Cordyline terminalis* (ta'un) are worn in the first menstruation ceremony to ensure that the flux will not occur again too quickly. *Cordyline* is also planted in the taro garden to make the taro grow well. After burial a cordyline is planted in a special corner of the garden. The name of the dead man is called out, and if the cordyline bends over, it is a sign that the man's spirit is sitting on it. A man, who pretends it is heavy, carries the cordyline with the dead man's spirit to the dead man's house, and plants the cordyline in the house. Then the dead man's spirit stays inside the house. In the case of earth burial which was introduced by missionaries, cordylines were planted at the head and foot of the grave "to mark the spot. This was the reason given", says BLACKWOOD, "but the use of cordylines would appear to be traditional, since these plants are connected with death, as well as having other ritual significance, in the old belief". To catch a large number of pigs the pig nets are whipped with cordyline; cordyline leaves are also used in rain magic; to strengthen a child, the child's body is rubbed with a mixture containing among other things the leaves of the two varieties of cordyline "takop" and "tom-tom". *Cordyline ferrea* (ariko) is used in medicine. To take revenge on a woman who refused her favours, the woman is struck with a croton leaf (sising) to make her menstruate continuously; in rain magic sising leaves and leaves and roots of takuruts (another croton) are used; sising roots are further used in love magic and in rain magic; crotons are sometimes planted between the houses, since they are valued for their colours or their properties as "medicine". Leaves of *erythrina* (wanono) are used in a medicine for the delivery of a child; cycas sp. (kiki'ie)

1) Bonitos are called "atun", which corresponds to the Polynesian word "atu", used in Samoa. BLACKWOOD 76 284, 327. 2) 76 328, 75 205, 208, PARKINSON 633 34. 3) BLACKWOOD 76 524 ff.

leafmidribs are used to make mourning belts; *evodia hortensis* (owen, pawen) is used as a protection against ghosts ¹⁾.

Prehistoric objects. At Petats, BLACKWOOD saw "a few specimens of stone pestles (akon) similar to the larger of the two examples figured by Parkinson" (of Bougainville) ²⁾. "These are still used for cracking almonds, but the people say that they are too lazy to make them nowadays ³⁾".

Mythological evidence. With regard to the stone pillar of Yam Island, the story, as related by a Pororan Island native, runs as follows: The stone was brought on a raft from some place a long way off in the days when the people had not yet learned how to make canoes. There came with it two women who were lighter in colour and quite different in appearance from the local population. These two women went to live at Pororan, but one of them was always coming over to Yame to weep at this stone for her people. After a time there arose a quarrel between the people of Yame and the people of Pororan, and the Yame people said the woman was not to come over any more. So the Pororan people came at night and took away the stone, but before they landed it, a storm arose and capsized the raft, and the stone made its way back to Yame. The woman still persisted in going over to weep at it, so the Yame people killed her ⁴⁾.

Here again we find a clear tradition of the arrival of the stone-using immigrants introducing stone-work, immigrants, who came from a place a long way off and who were lighter in colour, thus completely agreeing with the many stone-using immigrants of the other parts of Melanesia. If, as the story says, one of the women always came over to weep at the stone for her people, this seems to indicate that this stone had been erected in memory of the dead, thus agreeing in its function with all the other monoliths of Melanesia. Therefore I think we can now assume that this must also have been the reason for the erection of the stone pillars mentioned earlier.

The other myths contain a certain number of themes which, in the other parts of Melanesia, we have found to be associated with the stone-using immigrants, but these associations do not appear with the same degree of clearness as is the case in the other regions. As in the stories about Okeru, Porana, Tebu and Panaga(?) of the Shortland Islands and Southern Bougainville, also according to the Kurtatchi myth, there was a time when they had no knowledge of the sexual act, but men copulated with women at their armpits. The proper way to do it was taught first to the people of Tsiraun (Nissan), by a man named in different versions Uskawu and Manatchire, who came from a long distance on a raft ⁵⁾. Like the man

1) BLACKWOOD 76 20, 83, 124, 156, 259, 261, 303 f, 313 f, 319 f, 425, 490, 592-594, 598, 79 160. 2) PARKINSON 630 498, fig. 79. 3) BLACKWOOD 76 405, 77 79, CHINNERY 146 64. 4) BLACKWOOD 76 532. 5) BLACKWOOD 76 125 f.

who in the Shortland Islands climbs into the sky, the culture hero Panaga of Motuna, and others, he abolished the old method of cutting the children out of their mother's womb resulting in the death of the mother and introduced the normal kind of birth¹). This innovation, according to the Buka story, was introduced into Buka by the man Porana (whom in Alu we have seen to be the founder of normal intercourse and who is also known in Choiseul)²) who is said to have come from Nissan Island to Hanahan on Buka on the back of a turtle. THURNWALD calls Porana a "culture bringer"³). As mentioned, the theme of the first introduction of normal intercourse is recorded in connection with Okeru the brother of Kugui (Shortland Islands and Buin), and Panaga of Motuna was described as the first adulterer and the introducer of normal birth. Kugui and Panaga we have seen to be culture heroes, and we have shown their relationship with the stone-using immigrants. Are we entitled to conclude that the immigrants who, in Kurtatchi and Buka are associated with the same mythological themes (Porana and Uskawu) belong to the same group of stone-using culture heroes, although further deeds are not recorded of them? This identification is perhaps also supported by the fact that Uskawu came from a long distance on a raft like the light-skinned women who introduced stone pillars; Porana, on the other hand, came from Nissan which was a halting place also in the migration of Uskawu.

According to a Buka legend, the island was created when a god and goddess arrived out of the south (Bougainville) and, travelling in a mon (canoe) to the northward, the island of Buka arose in the wake of the mon. At various intervals the god threw away the husks of betel nut which he was chewing and these, in turn, became the small islands of the west coast of Buka⁴). We have no direct proof that these characters were stone-using immigrants. It is probable that the mon is more recent than the stone-using immigrants, and that it can be attributed to the culture of the "betel-people"⁵). That the god chews betel does not necessarily imply that he was also its introducer, although the mention of the mon and betel-chewing would strongly favour the possibility that he was actually a representative of the "betel-people". Should this be so, this myth either contains a syncretism, or the theme of the creation of islands belongs equally to the culture of the betel-people and the stone-using immigrants. The direction from which these people came would also support the theory that they were not stone-using immigrants. For, whereas it is more or less certain that all the stone-using immigrants came to Buka from the north-west, these people, on the contrary, came from the south. Now, the only people who, to our knowledge, came from this direction were the Mono-Alu Melanesians who, from the Shortland Islands along the coasts of Bougainville, came to Buka

1) BLACKWOOD 76 125 f. 2) For the Choiseul version see: THURNWALD 878 I 417 f. 3) 878 I 417 f. 4) BLACKWOOD 75 209, THOMAS 861 220. 5) See BLACKWOOD 76 369 f, FRIEDERICI 272 293, RIVERS 725 II 539.

and even to Nissan, Aneri, Tanga, etc. as has already been mentioned. And since these Melanesians can most probably be identified with RIVER's "betel-people", we are very likely faced with a migration of Melanesians and not with a migration of the stone-using immigrants.

The origin of the coconut is described in the following way: The younger of two brothers met his death by an accident (its nature varies in different versions) and the elder brother planted his head. In course of time a coconut tree grew up out of his mouth. From this tree there arose all the coconut palms that now exist¹⁾. We thus again encounter the theme so often found in association with the stone-using immigrants in the Shortland Islands, Buin, Florida, Malaita, Hiw, Lambumbu, Big Nambas, Epi, Tanna, and Futuna. But more detailed information is not given in our present story about the two brothers, so that their relationship with the stone-using immigrants can only be indirectly inferred²⁾.

According to a story of Pororan Island, the coconut was once a very tall tree whose top reached into the sky. Several birds tried to reach the top, but failed, and finally a flying fox succeeded in getting to the top and shaking down some coconuts. Then from the top of the tree he threw coconuts and bread-fruit and mangoes, and all the other fruits that grow on trees. Before this they had had none of them³⁾. Does this mean that all fruit trees came from the sky, with which we know the stone-using immigrants to be closely associated? Unfortunately the story is not sufficiently clear on this point.

According to a story of North Bougainville, the practice of cannibalism was taught the people by a woman who gave her daughter and her son-in-law pieces of her own flesh saying it was pig. When the two discovered the truth and the woman wanted to beat them, they ran away and climbed up a tree. The woman climbed behind them, but the two caused her to fall, so that she is killed. The man and the woman went up into the sky⁴⁾. Here again we have the characteristic flight up a tree before an ogre, and his final destruction (which, in the numerous analogous stories, is effected by letting go the cord on which the ogre tried to climb) as in the story of Qat of the Banks Islands (here, however, by the rebounding of the tree), in the story of Matiktiki with the white children (Tanna, Futuna, Aniwa), and similarly in the Malaita Island story. Here again we have the theme of the climb into the sky, so characteristic of the stone-using immigrants⁵⁾.

1) BLACKWOOD 76 296. 2) This connection is even less definite from the story of the origin of bananas which speaks only of a man who planted wild bananas, thus introducing their cultivation. But nothing else is known of this man. See BLACKWOOD 76 296. 3) BLACKWOOD 76 296. 4) BLACKWOOD 76 530, 77 75 f; for the same story in the Shortland Islands but with no connection with cannibalism or the climbing up into the sky see: WHEELER 933 47. 5) A natural rock was shown as the body of the woman who was killed, and who turned into stone. One informant said that one of the megalithic stone pillars standing at the foot of a tchiniv tree—the tree on which the man and the woman ascended into the sky—

The following myth is current, with local variations, throughout the whole of Buka and North Bougainville. All the people fled before the ravages of a man-killing being who on Buka is described as a fierce boar, on Bougainville as a giant man or a ghost woman. According to the Kurtatchi version the people fled to Nissan. One old woman was left behind, in spite of her entreaties to the fleeing canoes to take her on board. She bore two sons as the result of intercourse with a banana. When they grew up, they slew the monster, found wives from the people who now returned, and became the ancestors of the two main clans ¹). This myth of a woman who, left behind by the others, gives birth to one or two sons who kill the man-eating monster, has repeatedly been encountered; in a similar way the Saa woman who, in her labour, causes all the canoes to sink gives birth to "Born-by-the-Side-of-a-Bow" who is identical with Qat and, who, like Warohunuga, the Qat of San Christoval, kills the man-eating animals. The similarity is even stronger in the Santa Cruz Island myth of the sister of the ten (Qat) brothers; when her brothers fled before the man-eating ogre, she was left behind owing to her big foot with which she caused all the canoes to sink. Her two sons, whom she conceives from two lizards penetrating her throat, also kill the ogre. In the same way the ogre was killed by the two light-skinned sons of Qat's sister in Maewo. A similar story was found on Tanna, which, as will be remembered, contained elements of the Matiktiki story (the corroboration of the ogre's death by the birds), elements, whose associations with the Qat story have been explained. In these circumstances, our present story must be considered as belonging to the cycle of stories of the stone-using immigrants; for the mother of the heroes, according to the Maewo and Santa Cruz story, is Qat's sister, and according to the Ulawa story "Qat's" mother. The fact that, in some versions of the North Bougainville and Buka myth, features which we have learned to be characteristic of the stone-using immigrants are ascribed to this woman, is additional proof that the present story belongs to the culture of the stone-using immigrants. At Saposa Island north-west of Buka, this old woman is called Morena, and it is said that she created the land for them, taught them how to get food, and all kinds of crafts and gave them their clan organization. At Tiop Island the woman is called Topisbi'e ²). Now, we have found the building up of land and the creation of food and crafts to be some of the most characteristic features of the stone-using culture heroes. The Nissan people said that the story originally belonged to them, and add, that when the bones of the monster lay on the ground a snake ate some of them and turned into a pig which was the origin of all the pigs on Nissan, from where they were sent to all the other islands. Is there any connection between this snake and the figona snakes of San Christoval,

represented the woman who was killed, but this was denied by the other natives. BLACKWOOD 77 76. Therefore this isolated statement is probably of little or no value.

1) BLACKWOOD 75 210, 76 37-39, 77 67, 72 f. 2) BLACKWOOD 76 37-39.

Malaita, Florida etc. which also were the creators of pigs? Our present knowledge does not permit us to draw this conclusion. But it is perhaps significant that the origin of pigs is associated with the ogre story, which itself belongs to the culture of the stone-using immigrants and that pigs are said to have spread from Nissan, which we have seen to be a halting place of some of the culture heroes of this region. Discussing the problems which are raised by this myth, HADDON in a letter to BLACKWOOD wrote ¹⁾: "The relation between the "two brothers" and the Oceanic Brethren (Qat-Tangaloa, etc.) is obscure, though doubtless there is some connection. It seems evident that some syncretism has taken place. We have to take into account the original Papuan stratum in Melanesia and various successive waves of culture from Indonesia ... I do not see how we can with our present knowledge differentiate between the tales and cults of the various layers." It is certainly this syncretism which makes it so difficult to work out the mythology of the stone-using immigrants. But I think that, in spite of all these difficulties, we have nevertheless succeeded in the present work in disentangling these myths.

Nissan: Here we come to the extreme limit of the Solomon Islands. From the many records which exist we are well acquainted with the history of this island. According to one tradition, the island was peopled by invaders coming from the Polynesian Abgarris Islands. Later the island was invaded by dark-skinned Buka Islanders who are probably responsible for the partial extermination of the light-skinned Polynesians. It is probable that these immigrating Solomon Islanders are the last vestiges in this direction of the Mono-Alu migration ²⁾, a migration which we have seen to be of recent date ³⁾. In race, language, and culture the present inhabitants of Nissan, particularly in the eastern part of the island, are Buka people ⁴⁾, but in the neighbouring Pinepil in the north, a light-skinned New Ireland population is to be found which, according to most writers, can be traced to trading relations with Aneri, whose people are actually of the New Ireland type. Aneri Island imports many articles from Tanga, Tabar, Simberi and New Ireland and exports them via Pinepil to Nissan. Since Nissan, on the other hand, has intensive trading relations with the homeland Buka, this island is really a trading centre for the Bismarck Archipelago and the Solomon Islands ⁵⁾.

1) BLACKWOOD 77 74. 2) THURNWALD 881 101 ff, NEVERMANN 613 6 f. 3) The history of the Carteret Islands is very similar. Here too, the Buka invasion, which is said to have taken place three generations ago overlaid an earlier light-skinned Polynesian population. PARKINSON 630 472, 478, 524, 631 109, 633 1, 638 272 f, RAY 694 4, THURNWALD 881 103, FINCH 236 47, FRIEDERICI 272 296, BROWN 103 343 f, SCHNEE 837 41, BURGER 113 171. 4) SORGE 788 399 f, PARKINSON 630 472, 478, BLACKWOOD 76 382, FRIEDERICI 272 290, SCHNEE 837 41, 144, BURGER 113 176. 5) PARKINSON 633 1, 30, 638 274, FRIEDERICI 271 121, 272 293, KRAUSE 440 48, 67, 87 f, 92, 98, 121, 153, 157 f, THURNWALD 884 107 ff, LUSCHIAN 504 294 f, SORGE 788 396, FINCH 236 43, 88, 152, 177, 513.



The geographical distribution of the Megalithic Culture and its migrations in the Solomon Islands.

The women's houses on Nissan stand about 7 or 10 feet apart and as a protection against pigs the gaps between the houses are closed in front and behind by a stone wall of heaped up coral blocks. The space thus enclosed is used as a garden in which an ornamental shrub with variegated leaves is cultivated. The other gardens are also protected by walls (bilit) of coral stones and logs to prevent the pigs from getting in¹). We are unable to determine from the present sources of information whether the existing stone-work goes back to the Polynesian inhabitants, or whether it is due to the contact with the islands off New Ireland. More detailed information is necessary before we can come to any decision regarding the distribution of stone-work on Nissan Island, and it is essential particularly to know whether this stone-work is also found in the eastern part of the island which to-day is inhabited by the Buka immigrants. FRIEDERICI's information applies to Balel village in the extreme north-west of Nissan opposite Pinepil, but we do not know whether this applies exclusively to this village. We have previously shown that Nissan was also one of the halting places of the stone-using immigrants on their migration to Buka.

THE BISMARCK ARCHIPELAGO

New Ireland: Dark-skinned frizzy-haired elements are found side by side with light-skinned elements all over this island. Very light-skinned people are found in the north-west side by side with dark skins, and in the north-east wavy hair is also met with. In Lesu the skin is brown, and a myth characteristically speaks of a woman who had two husbands, and who had a decided preference for the one who had the lighter skin. Generally speaking, on the east coast the skin varies from light to dark brown, and in the southern part of the island also the skin is relatively fair, although the Melanesian type prevails. Muliama shows the same physical characteristics as Tanga Island, but then, Muliama is a Tanga colony²). The trading relations cover a relatively small area. The east coast (the villages Fisoa, Lesu, Lemeris, for instance) has trading relations with Tabar; the southern regions (e.g. Lambell, Kandass, and Siari) trade with Aneri Island; Tanga, Lamassa, Kandass, Laur, etc. trade with Mioko and the Gazelle Peninsula, and the northern regions have trading relations with New Hannover³).

Around the men's houses in New Ireland there is a spacious rectangular courtyard (antein) fenced in by a rectangular wall called eribn balat of

1) KRAUSE 440 72, 128 f, FRIEDERICI 271 83, fig. 49, 268 Pl. 11, SCHMIDT 836 105, THURNWALD 884 109. 2) KRÄMER 438 15, KRÄMER-BANNOU 439 259, PARKINSON 630 259, POWDERMAKER 678 25, 251, GRAEBNER-STEPHAN 300 18 f, BÜHLER 110 3, PÖCH 677 612, ZÖLLER 989 283, BLUM 84 29, CHINNERY 149 28, SCHLAGENHAUFEN 818 4, 820 6, BELL 63 256. 3) FINSCH 236 42, 202, 394 f, 238 1 139, PARKINSON 630 261, 283, 285, GRAEBNER-STEPHAN 300 38, 55, 72, 106, 160, KRÄMER-BANNOU 439 206, CHINNERY 149 29, POWDERMAKER 678 22, 318, etc.

coral stones about three feet high. Sometimes this wall is very thick (in Komalabu village it was almost 7 feet thick) ¹⁾. Access to this courtyard is over the wall by means of the forked trunk of a big tree, the "Einsteiniggabel" as KRÄMER-BANNOU calls it. Women are not permitted to enter. These forked trunks, which in some cases are carved with fishes, sharks, snakes, crocodiles, or human heads, are called "matanangas", i.e. "eye of the demon". They are believed to prevent evil spirits from entering the men's house. Every men's house belongs to a certain chief whose relatives are buried in the rectangular courtyard (antein). These "Einsteiniggabeln" are of particular interest, since they are apparently identical with the forked posts of India, South-east Asia, etc. although their function is different. From their very name "eye of the demon" and their power to protect against evil spirits it is obvious that they are more than a simple carved stair-way. It is moreover probable that there are other examples of forked wooden posts in Melanesia. Thus a certain number of malanggans show some kind of fork ²⁾. It may further be noted that this formation is found on many masks and skull effigies of South Malekula ³⁾. WILLITSCH, who discusses the "Gabelholz" in Melanesia mentions its occurrence also in the Admiralty Islands, and he is of opinion that certain canoe shields of the Sepik, and certain roof decorations of New Caledonia are likewise "Gabelhölzer" ⁴⁾. I have no intention of discussing this problem at greater length here, but we shall perceive that the stone-using immigrants were present in all the regions mentioned, so that in Melanesia, as well as in all the other regions, the "Gabelholz" forms part of the megalithic culture.

The stone walls surrounding the men's houses with the "Einsteiniggabeln" are found on the whole of the north-east coast, extending south as far as Muliama, and it is not until we get south of Muliama that wooden fences are found. The stone walls occur on the west coast, as far as I know, only in Kono, Komalabu, and Rehenedel, i.e. villages situated on the narrowest part of the island ⁵⁾.

In Southern New Ireland, although there are no stone walls around the

1) FRIEDERICI 269 147 records the word for "Steinumfriedung", "a oro na-at" in the village of Lamassa. 2) PEEKEL 647 43, KRÄMER 438 Pl. 30, 31 Nr. 7. 3) SPEISER 789 Pl. 84 fig. 3, Pl. 92 fig. 5, Pl. 95 fig. 3, Pl. 98 fig. 2 etc. 4) WILLITSCH 962 338 ff. 5) PÖCH 670 10 (Belik and the whole north coast), KRÄMER 438 62 (Middle New Ireland), 69, Pl. 17, p. 22 (Lamasong), 30 (Hamba), fig. 4, p. 21, KRÄMER-BANNOU 439 177 (Komalabu) Pl. 88, p. 4 (south of Namatanai), 265 f (north of Muliama, Lokon, Kono, Rehenedel, etc.) fig. 1 p. 5, fig. 80 p. 164, p. 163 (Rehenedel), 201 f (Lemeris), 235 f, 207, 273, (Lamasong), 57, (Muliama), 67 (Sohun), 74 (Belik), 124, fig. 61 p. 124, p. 70 (north of Namatanai), 132, 199 (Loasigi), 277 (Lamasong), fig. 131, p. 236 (Lelet District, Lenuat village, NEUHAUSS 602 76 (Nokon), FRIEDERICI 271 165, PEEKEL 647 46, 645 44, 46, 648 525 (Lauan), BROWN 103 164 (Kudukufu), SCHLAGINHAUFEN 817 219 (Polon), 214, 820 1 f (Muliama), 821 824, 826, GROVES 308 334, 345, BURGER 113 161 (Namatanai), HESSE 357 22, NEVERMANN 611 127, 129, 614 16 (Lokon District), 24-26 (Northern District), 30.

men's houses, in the districts Laur, Kandass, and Pugusch each house is surrounded by a wall of coral stones ¹⁾.

At Matakama (Makataua) on the south-west coast "the entrance to the



Fig. 14. Men's house surrounded by stone wall, Komalabu village, New Ireland (after KRÄMER-BANNO 439 177).

village was closed by stones in such a manner as to permit the passage of one abreast; but the structure had fallen into ruins" ²⁾.

STRAUCH gives the following somewhat vague description of the houses of the Catarine Harbour region on the west coast ³⁾: "Die Grenzen der immer offenen Veranda waren mit einer Reihe von Steinen zwischen den Pfosten bezeichnet. Öfter hat das Dach an einem Ende einen Ausschnitt, d.h. die Veranda nahm nicht die ganze Längsseite des Hauses ein, in solchen Fällen war diese "Steingrenze" doch weiter fortgeführt, einerseits in der Richtung der Pfosten der Veranda, andererseits in der Richtung der Schmalseite. Ob diese irgend einen praktischen oder andern besondern Zweck hat, ist nicht erkundet worden" ⁴⁾.

Similar stone arrangements seem to exist in the village of Mesi on the west coast. KRÄMER-BANNO ⁵⁾ gives the following description: "Around the different parts of the village there were stone walls, and in the inner part, the village place was neatly covered with gravel.... In front of the

1) GRAEBNER-STEPHAN 300 103, PARKINSON 630 295. 2) PFEIL 655 79. 3) 847 92, similar 262 228. 4) This information is of interest in as much as the Catarine Harbour region, i.e. the second landing place of the "Gazelle" (3° 11,5' 151° 39,3') probably corresponds to the area of the Najama tribe, where the language is Papuan—very rare in this island, FRIEDERICI 272 270 f, 288, 271 112, 269 35, KRÄMER 439 17; regarding the languages see also: GRAEBNER-STEPHAN 300 149, POWDERMAKER 678 19, RAY 694 9, PFEIL 656 286 etc. etc. 5) 439 180, fig. 89 p. 179.

doors of the houses there was usually a semicircle of single stones which



Fig. 15. "Einsteiggabel" in Rehenedel, New Ireland (after KRÄMER-BANNO 439, Fig. 80).

were possibly used as seats", but KRÄMER-BANNO was unable to verify this use.

A similar description is given by FRIEDERICI¹⁾ with regard to Logun

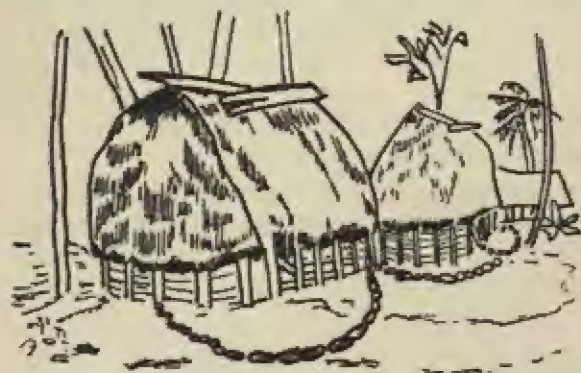


Fig. 16. Houses in Mesi village, New Ireland (after KRÄMER-BANNO 439 179).

and Lambu village. "The ground inside and outside the houses is paved with stones. Every courtyard pointing in the direction of the village place is

1) 271 83.

surrounded by big flat stones. These stones, which are laid down in the paving like a mosaic form a kind of stone wall seeming to protect the courtyards they surround against intruders".

On Lambom Island on the southern extremity of New Ireland, the villages are separated from each other by stone walls (*woronat*), 3 feet 4 inches high, of loosely heaped up coral blocks. One house stood upon a little stone foundation, as is also the case of the houses of Likiliki on the south-east coast. Similar stone walls run along the shore. The ground in front of the houses is well levelled and paved with stones; the floors of the houses are made in a similar manner. The space in front of the men's houses is rectangular, fenced in by a stone wall, and planted with coconut palms. Along the stone walls aromatic plants and variegated ornamental shrubs are planted, so that the necessary dancing decorations may be always at hand ¹⁾.

By comparing the neighbouring cultures, GRAEBNER and STEPHAN reached the conclusion that Lambom Island, which the earlier discoverers from CARTERET to BELCHER found to be uninhabited, and which was found to be inhabited only after 1880 ²⁾, "has been peopled from different directions, probably from King village as well as from several villages on the east coast, possibly also from Mimiassa and Likiliki". They further pointed out that the culture also showed some similarities with Aneri and some of the other small islands. Whether Laur elements also participated in the peopling of the island is uncertain ³⁾, but it is possible that some other influences contributed to the culture of this island. Lambell, Kandass, and Siar have trading relations with Aneri; Muliama is a Tanga colony, and Siar has also been peopled by immigrants from Tanga and Aneri ⁴⁾. From the stone-work mentioned, it may be concluded that on the west coast cultural relations must have extended some distance to the north. Apart from Matakama on the south-west coast, stone walls around villages were only found in Mesi village, and we shall come across them in Tanga Island. The paving of the ground inside, and in front of the houses, tallies with this practice in Mesi, Logun and Lambu, and the rectangular stone walls in front of the houses correspond to those of Catherine Harbour, Mesi, Logun, and Lambu. Courtyards surrounded by stone walls in front of the houses had moreover been found in East and North-east Guadalcanar. The house foundation of stone corresponds to those of Likiliki which, according to GRAEBNER, was one of the starting points of the immigrations to Lambom Island. The origin of these stone foundations can probably be traced to Tanga Island, since house-mounds (although of earth) are found on this island. Thus the character of the stone-work of Lambom Island confirms

1) GRAEBNER-STEPHAN 300 97, 103-105, 157, DUPERRÉY 204, Atlas Pl. 22. 2) GRAEBNER-STEPHAN 300 7, 10, 156. 3) GRAEBNER-STEPHAN 300 157 f, STEPHAN 842 29. 4) FINSCH 236 39, PARKINSON 630 261.

the general impression that the peopling of Lambom took place from different directions.

Unfortunately, no detailed information is forthcoming regarding the stone walls which "run along" the shore. In Komalabu, south of Mesi on the west coast, FRIEDERICI¹⁾ saw "the crude, but nevertheless interesting attempt to erect a kind of a mole or breakwater perpendicular to the shore, by heaping up coral blocks". In Muliama, KRÄMER-BANNO²⁾ saw "a stone jetty extending far into the sea which served as a landing place for canoes", but we are not told whether this was a native structure built without European influence.

KRÄMER-BANNO³⁾ gives the following account regarding the village Kaipulut on the east coast (near Silom village): "We descended to the village of Kaipulut on the coast. At a little distance from the village we were shown the wonderful bathing place in the bush which we gladly used. These were two basins enclosed by coral stones. The water gushed directly from a rock into the smaller of the two basins". Were these really bathing places as KRÄMER-BANNO thinks? The only bathing place which we were able clearly to attribute to the stone-using immigrants was found on Ulawa, but its stone-work is quite different from that which is mentioned here. Were it not for their situation in the bush it would be not unlikely that they were fish or turtle ponds such as those found in New Georgia and whose association with the stone-using immigrants was evident from the myths in Malaita, Arosi and the New Hebrides.

Near the village of Bnae, inland from Katendan village on the east coast, there was a well in a deep hole lined with stones. In the neighbouring Kandan village as well as in Lemeris village a "walled-in well" was found⁴⁾.

A word must be said about the shrines (marandan) of the rain magicians on the east coast of New Ireland, on account of the stone-work connected with them. The largest and best preserved shrines were found in Lemeris and Lamason. In Lemeris there were a certain number of yards surrounded by stone walls, one within the other, and only in the innermost were there numerous regularly built-up stone heaps. In Lemeris there were twelve. Upon them lay big tridacna shells in the interior of which human skulls and bones had been deposited⁵⁾.

KRÄMER-BANNO⁶⁾ gives the following account of Tembin village on the west coast, somewhat north-west of Lambu: "Near the northern end of the village, in a fenced-in enclosure there were a certain number of oval stones of the size of goose eggs, half buried in the earth. They were said to be taro stones and were believed to further the growing of the taro, and they were considered to be dedicated to the gods".

The accompanying figure published by KRÄMER-BANNO shows that the

1) 272-276. 2) 439 11. 3) 439 78. 4) KRÄMER-BANNO 439 199 f, 205, 216.

5) KRÄMER 438 49 f, Pl. II B, XI, KRÄMER-BANNO 439 201-205, 273, fig. p. 109, 204.

6) 439 pl. 192 f, fig. 102.

upright stones are surrounded by a stone circle. Whereas KRÄMER-BANNOU says that these upright stones were the size of goose eggs, A. KRÄMER compares them with monoliths, specifying that they had been gathered in the riverbed; and he adds: "they are like a long thin loaf of bread in shape, and are often ... painted red, since the spirits like this colour", and he is of opinion "that this is a phallic fertility magic and a protection from evil spirits so frequent in Indonesia" ¹). But neither of these writers mentions any definite magic rite in which these upright stones were used. It is therefore doubtful whether these stones can be considered as magic stones, the use of which, in the magic of Melanesia, must in general be attributed to the culture of the Papuans ²). The fact that they favour the growth of the



Fig. 17. Taro stones, Tembin village, New Ireland (after KRÄMER-BANNOU 439 fig. 102 p. 192)

taro by being dedicated to the "gods" by no means signifies that they were used magically. On the contrary, this indication would rather favour their megalithic character, since we shall show these "gods", who here also introduced the taro and other food plants, to be none other than the stone-using immigrants. One is therefore inclined to compare these stone circles with the others found in Melanesia, and to consider the upright stones as probably being small monoliths. It should, however, be mentioned that this is the only account of stone circles or monoliths in New Ireland, and that it applies to the west coast, where, as has been seen, stone-work is less frequent than on the east coast. In these circumstances therefore, it is preferable to wait until further information regarding this stone-work is available.

The belief in ghost sharks is also current in New Ireland, and a real cult of sharks flourishes particularly on Tabar Island. In New Ireland there are some sacred grounds where human bones, and sharks crudely

1) KRÄMER 438 46. 2) See: RIESENFELD 719 7 ff.

carved in stone are to be found, and where, by way of prayers and offerings, success in fishing is sought¹).

Sacred Plants. In the courtyards of the men's houses, surrounded by stone walls, croton shrubs and other ornamental plants are grown. After their seclusion during the initiation rites of Middle New Ireland, the novices are exhibited in a special house. On this occasion dracaenas (*natloi*), croton, and other ornamental shrubs are planted by the magician in different parts of the house, with invocations to the spirits of the dead; these plants are intended to take root and bring success (Lemeris village). In case of disease, the magician strikes the sick person with cordyline leaves (Knombin village, Middle New Ireland), and in rain magic dracaena leaves are used. Croton branches are introduced into the septum of the nose of a certain group of malanggans. To work himself into the ecstatic condition necessary for a certain type of magic, the leaves of *evodia hortensis* (a gas) are eaten (Middle New Ireland). In Middle New Ireland, cordyline terminalis (a togat dardarana or tagete), a wild cordyline with green leaves (togat), another variety of cordyline (a garegare), hibiscus (a puspupal) (another hibiscus variety is called paluo), ocymum (a sigil), coleus (a tata), and costus speciosus (a pusūah), are all used in the various kinds of magic. At the ends of a canoe, bunches of croton are hung "to which a particular amulet-like effect is attributed". At certain dances, branches of dracaena and cordyline terminalis are carried in the hands, and in the dances which are held after the death of a man and in which the dancers represent the spirits of the dead, bunches of cordyline terminalis are worn by the dancers. In King (South New Ireland), before burial, a bunch of cordyline terminalis is used to sprinkle the body. In the northern part of New Ireland, before cremation, the dead are decorated with croton, cordyline, and evodia. In Lamasong, after exhumation, the skull is buried in a corner of the courtyard of the men's house, and dracaenas are planted there. Croton is planted around the houses (North New Ireland and Lamasong), and the roads in the vicinity of the villages are also planted with croton, dracaena, and cordyline (Lamasong)²).

Prehistoric objects. I know only of the very remarkable objects which PARKINSON discovered in Nusa and Kavieng in the north of New Ireland. In Kavieng, PARKINSON found a stone pestle, and in Nusa a few big stone bowls. The natives were quite unable to give any information regarding these finds³).

1) KRÄMER-BANNOU 439 203, BÜHLER 110 20; sharks are called "baiowa", STEPHAN 843 220, 842 19, corresponding to the pa'ewa, pagewa, etc. of the Solomon Islands.

2) KRÄMER-BANNOU 439 67, 74, 101, 124, 140, 176, 182, 199, 208, 211, 235 f, 277, KRÄMER 438 21, 25, 44 f, 53, PEEKE 645 55, 62, 79, 94, 101, 112 f, 121, 646 821, 647 50, 59, BROWN 102 186, PFEIL 656 93, GROVES 307 225, GRAEBNER-STEFHAN 300 116, FINSCH 238 1 130.

3) PARKINSON 630 557 f, fig. 99, 100, 101, 102, 639 117 fig. 1, 2, GRAEBNER 298 746, NEVERMANN 614 33.

Mythological evidence. Moroa and Sigeragun are the "gods" known in Middle New Ireland. Moroa's parents are Moralik and Niraut. Moroa lived in Mesi on the west coast and Sigeragun lived in the vicinity, in Sepka, where his occupation was the breeding of pigs. One of his pigs brought forth young and from these descend the present pigs of Tombara. One of the pigs was painted black by Moroa, wherefore all the Tombara pigs are dark. On the east coast in the Lokon District, there is a village called Kanam which is also known as the place where Moroa worked. Here, on the shore, Moroa created his malanggans. From Kanam, Moroa went to the north and rested on the shore of Pining near Lemeris. Here the god created all the languages which are spoken in New Ireland and its neighbouring islands. Three footprints which Moroa left when he descended to Kandan Bay can still be seen here. From Kandan, Moroa went north to Panagundu, where he made great plantations, particularly groves of bananas "gundu", from which the village got its name. He also planted taro and brought fire to the inhabitants of New Ireland. According to the version recorded by BÖRNSTEIN¹⁾, Moroa (whom he identifies with the sun) also created the earth, the trees, men, pigs, birds, fishes and crocodiles. The men migrated everywhere "also as far as Buka". It is said that finally he departed to an island which is situated very far in the north. Nobody knows where this is, but "it is remarkable", says KRÄMER, "that I found the wind god Moroa in the Central Carolines, i.e. exactly to the north of Tombara, so that the myth indicates the right direction. Whilst Moroa was migrating, Sigeragun went to the island Tabar, then to the north, and after that along the western coast in a southerly direction. He distributed the money he had received from Moroa. Then he returned to Mesi where he disappeared through a hole into the underworld²⁾. Moroa took the female fish-hawk Ranggam as his symbol, and to Sigeragun he gave the male sea-hawk, Malam³⁾).

KRÄMER⁴⁾ has expressed the opinion that the man Lambörung, whose story from Lamasong village is recorded by KRÄMER-BANNO, "can un-

1) 86 245. 2) Regarding this underworld, it is said that Sigeragun invited all the people who had a pair of pigs to come there after their death. KRÄMER 438 47. 3) KRÄMER 438 19, 33 f, KRÄMER-BANNO 439 80, 272 Note 20, 280, NEVERMANN 611 127; I shall not at the moment discuss the question whether there is any justification for interpreting the Moroa stories as astral myths. KRÄMER 438 33 f) as well as BÖRNSTEIN saw in Moroa a sun god, but PEEKEL has expressed the opinion that the Moroa myth is a moon myth (646 24-40, 815-820), a view, he maintains also with regard to almost all the other myths. The question might be asked whether some of the culture heroes we have come across so far are not astral symbols. We are not yet, however, in possession of sufficiently definite data to permit of such a supposition, and it serves no useful purpose to deal with this problem as PEEKEL has done; his moon-mythological interpretations are well known, but his attitude towards this problem is biassed, and the scientific value of his interpretations is open to doubt. On the other hand, it is immediately apparent that historical events are portrayed in almost all these myths. 4) 438 33.

mistakably be identified with Moroa". This story relates: A long time ago, before taro, yams, and fruits existed, there lived a certain couple who had two children. Each day the parents went into the bush to fetch leaves for cooking since this was their food. Once, when the children were alone at home, the man Lambärung came out of the sea with taro, yams and bananas which he gave to the children to eat. Henceforth the children refused their parent's food, and when the astonished father followed his children to the shore, Lambärung gave him seeds of taro, bananas, yams, etc.¹).

If we analyse the myths of Moroa, Sigeragun, and Lambärung, the following facts are evident: we are again faced with a story of migrations of culture the trend of which coincides with those regions in which stonework has been encountered. The man Lambärung came from the sea with taro, yams, and bananas, suggesting that these immigrants and introducers of culture came from over the sea, and the story of this culture bringer strongly resembles that of Bego of the Shortland Islands and Buin, whom we have seen to be a stone-using immigrant. The creation of pigs, food-plants, man and the land, the leaving of footprints, and the final departure, are all very characteristic features of the stone-using immigrants, and the association of Sigeragun with the underworld equates him with some of the other stone-using culture heroes. For these reasons we think we are entitled to see in Moroa, Sigeragun and Lambärung representatives of the stone-using immigrants.

Another "maker or father of all things is Larunaen, whose seat is in the west". His wife, Hintabaran, was really his sister, and also his helper and all the people are his descendants. When they multiplied, Larunaen made the earth so that he could send away those whom he did not wish to stay longer with him. Those who remained with him are the gods, but the people leaving the seat of Larunaen moved south and east. Larunaen provides man with all that he needs. All food comes from Larunaen²). It is well known that PERRY³) has seen in the incestuous union a characteristic feature of the stone-using immigrants, an opinion which we shall not discuss at great length in this work. If we are right in considering Larunaen as a stone-using immigrant, it is of the utmost interest that "his seat is in the west" from where his descendants moved south and east, since we must suppose that the stone-using immigrants came from the west.

The following story is recorded of Lesu village: The people of Lesu went to one of the Tabar islands because they were afraid of a pig named Luana, which ate people. The old woman, Tsenabonpil, was left behind because she had a swollen leg and it was feared that she would sink the canoe. After the people had left, she had intercourse with a bird, and she gave birth to twin boys, Daror and Damuramurari, who, when they grew

1) KRÄMER-BANNOV 439 135 f. 2) Cox 174 195 f; no definite indication with regard to the locality from which this myth comes is given. 3) 651 96-104,

up, killed the man-eating pig¹). Then the Lesu people returned and Tsenabonpil gave them their totemic structure, the knowledge of magic, medicine, of all their crafts and of everything now known. After this, she and her two sons disappeared, and no one knows where she is²). The almost complete identity of this story with that of the female culture hero Morena of Buka Passage, and the analogous stories of Ulawa, Santa Cruz, Maevo, and Tanna whose association with the stone-using immigrants we have shown, is evident. The theme of the final departure from the world, which did not occur in the other analogous stories, is a further indication that this story belongs to the culture of the stone-using immigrants.

In Medina, another linguistic unit of New Ireland, Marruni is considered to be the original creator of society. He had the body of a man, but an exceptionally long tail, resembling a snake. He had two wives for whom it was taboo to look at his tail. One day they saw it. Marruni was both cross and ashamed and sent them to their village on one of the Tabar islands. Then he cut his tail into segments and gave to each segment the name of a clan, and from this came the people of the clans. Also some segments were marked as birds, snakes, fish, pigs, and bush animals. Marruni came from Tabar, the village of Moari on Tsimberi. He brought with him from this place both the magic and the malanggan rites³). Thus Marruni is also a culture hero, and what brings him so particularly close to the stone-using immigrants is the fact that he is snake-like as were so many other of their culture heroes.

The origin of copulation is narrated in the story of Lesu, in a manner similar to that of Kurtatchi and the other places where this myth has been found⁴).

The theme of the origin of the coconut out of the skull of a man, named Saktale, who burnt himself to death occurs in Middle New Ireland⁵), but nothing else is recorded about Saktale.

As Soi, of the Bougainville Straits, who introduced better canoes and fishing nets, so Sikodo, a fabulous giant of New Ireland (region?) introduced fishing traps, the magic connected with them, fishing nets and shell-money into New Ireland⁶). If it is true that Soi is a stone-using immigrant,—and there seems to be some ground for such a supposition—this would probably also apply to Sikodo. But as in the case of Soi, the evidence regarding Sikodo is also very scanty.

We must mention briefly the numerous stories about Soi and Tamor or

1) For a somewhat similar story of Mesi village, see: BÖRNSTEIN 86 245. KRÄMER 438 42 f. NEVERMANN 614 19 f; the names of the heroes differ slightly in the various versions. We can pass over the interpretation of PEEKEL 646 818 ff, who considers this legend, as almost all the others in this region, as a moon myth. 2) POWDERMAKER 678 34 f, 679 363. 3) POWDERMAKER 678 273 f. 4) See: POWDERMAKER 678 241 f. 5) PEEKEL 645 71-73. 6) COX 174 198 f.

Tamano (also used collectively for a group of brothers)¹⁾ known on the east and the west coast of New Ireland. The brothers are married and these two couples are the ancestors of man. Soi is small and weak but intelligent; Tamor is tall and strong but stupid. They are antagonists, and many stories relate how Soi deceived Tamor²⁾. Soi is the head of the Maramara moiety with the taragau (fish hawk) as his eponymous bird, or the light coconut as his symbol, and Tamor, the head of the Pikalaba class, is connected with the Malaba (eagle), or the dark coconut. Whereas Taragau is a fisher, Malaba is not³⁾. From this RIVERS has concluded⁴⁾ that Maramara, Taragau and Soi represent the immigrants who came by the sea, and Pikalaba, Malaba, and Tamano represent the aborigines⁵⁾. The association of these immigrants with the light coconut certainly reminds us of the light coconut of the Atawa of San Christoval. It would be tempting to identify this New Ireland immigrant Soi with the culture hero Soi of the Bougainville Straits who probably belonged to the stone-using immigrants. But the identity of the names proves very little indeed, and it has frequently been seen in the course of this study that identical characters appeared in the various regions under different names even within some relatively small areas. Of one of the beings mentioned in a Namatanai myth it was said: "He took a boundary stone and separated the territory of Soi from his own"⁶⁾, but this is not sufficient to conclude that Soi used to erect stone-work. The two antagonistic brothers have in many cases, however, been found to be representatives of the stone-using immigrants, and in the course of this study a great number of other examples will be seen to prove this. The connection of the Soi-Tamor story with these myths has been pointed out most clearly by NEUHAUSS, who says⁷⁾: "The character of these, especially the plural Tamors, points to their connection with the Banks Islands. There Qat takes the chief place. Below him are again eleven brothers named Tagaro. The first of these brothers was Tagaro Gilagila, the wise and clever, the second was Tagaro Loloqong, the stupid ... Tagaro Gilagila then corresponds to Soi, Tagaro Loloqong to Tamor ... The remaining Tagaros form with Tamor the plural Tamors". The fact that the theme of the two antagonistic brothers occurs again and again at many places in Melanesia with astonishing similarity leads to the conclusion that it must be a theme which, in Melanesia at least, belongs as a whole to the mythology of the stone-using immigrants and which cannot be explained by the local contact of two different races as RIVERS has done. Whether the origing of this theme can eventually be traced to such a cause should

1) For the controversy about Tamano, see also: GRAEBNER-STEPHAN 300 119 and PEEKEL 645 67 f. 2) See PEEKEL 645 57-66, 84-89, etc. 3) Cox 174 196 f. 4) 725 11 559-561. 5) We do not discuss the moon-mythological interpretation of this myth given by a few writers, since the only appropriate interpretation seems to consider it as a recording of historic events. 6) NEUHAUSS 602 58. 7) 602 Note 5, quoted by CAPILL 121 57.

by no means be excluded, though where this development took place cannot be decided at this point of our investigation. NEUHAUSS¹⁾ has drawn the further conclusion with regard to New Ireland: "Soi and Tamor will have become known to them through wandering peoples from the New Hebrides and Banks Islands". Upon this, CAPELL made the following remarks: "This may possibly be true, but it is very unlikely ... the westward movement seems rather too great, and the probable course would be eastwards from New Ireland rather than westwards to it". I do not by any means consider that the great distance of this supposed westward movement is a very strong argument against it. What actually is against it, however, is the fact that the migrations of the stone-using immigrants, as far as we know with certainty, followed a west to east direction, and this is also most probable in the present case.

One story relates that the child of the betel palm climbed upon its mother, the betel palm, when it was insulted. Then the betel palm grew so high that the child reached the sky, whereupon the betel palm shrank up again²⁾.

None of these mythological beings shows direct connection with stone-work and their relationship to the stone-using immigrants can only be concluded from a comparison of the mythological evidence of the whole of Melanesia. The following myth of Fezoa, however, records the existence of people who constructed stone-enclosures and is therefore of interest: The Lulura are dwarfs with great eyes. They had their houses and stone-enclosures in Lovolai. From there they went to Paterafat and there also built houses and a stone-enclosure. From the mountain, however, they were able to see the sea and to hear the surf of Cape Sali. Therefore they left and went to Mt. Tamafulun near Lemakot. But as they could still hear the surf of the sea, they went further to the south, to Mt. Panesemen near Fezoa. Since from here too they could see the sea, they left again and went to Kafkaf, and there built houses and a stone-enclosure. But they still heard the breakers, so they went further to Mt. Boylein near Lourup, and there also built houses and a stone-enclosure. For fishing they went to Bol on the coast³⁾.

We are here faced by a migration starting from a point on the north-western coast and proceeding along the east coast in a south-easterly direction. The reason repeatedly given for the continuation of this migration, that

1) Quoted by CAPELL 121 57 f. 2) NEVERMANN 614 35-37. 3) NEVERMANN 614 17 f. It might be added that the Lulura were also regarded as the inventors of the malanggans. According to the version mentioned above, Moroa and Marruni were their inventors, and, according to a third story, one of the heroes who kill the man-eating boar, is regarded to be the first carver of malanggans (NEVERMANN 614 16, KRÄMER 438 68 ff). Although we shall not discuss the problem of the malanggans, it is at least significant that all the characters who are considered as being the inventors of the malanggans, are, according to our reasoning, stone-using immigrants.

the immigrants were still able to see or to hear the sea, is strongly reminiscent of the migrations of Hatuibwari and Red Head of San Christoval and of Walutahanga of Malaita, who always left the places they had reached, since from there they were able to see their old homes which they no longer wished to see. Furthermore, it has frequently been found that the stone-using immigrants penetrated deeply into the mountains. It is striking that the stone-using people are here described as dwarfs. Although our knowledge of the anthropological characteristics of the stone-using immigrants is somewhat scanty, and we have no definite information particularly regarding their stature, it is nevertheless improbable that the Lulura themselves should be representatives of the stone-using immigrants. They strongly resemble the Mola of Guadalcanar whom we have also learned to know as constructors of stone-work. It is quite possible that the Lulura as well as the Mola owe their origin to a syncretism. On the other hand, it is not impossible that they represent a similar people such as the Masi of San Christoval and the analogous people of the other islands whom we have seen to be the slaves or workers of the stone-using immigrants. If these people were brought to these regions by the stone-using immigrants, their migrations would necessarily correspond to those of the stone-using immigrants themselves. In view of the existence of the stone-using immigrants in the Western Bismarck Archipelago, it is quite probable that the immigrating stone-using people first arrived on the west coast of New Ireland. In this respect the two facts agree that the migrations of the Lulura probably started from Lovolai or some neighbouring place, and that the home of Moroa and Sigeragun were the villages Mesi and Sepka on the west coast, and that their migrations and sojourn on the east coast seemed to have occurred later. We have seen that the stone-work on the west coast is much poorer than that on the east coast, but it is significant that the men's houses surrounded by stone walls with "Einsteinigabel" were found on the west coast just in the district south of Mesi. On the other hand, it must be mentioned that this region is the narrowest part of the island, and, for instance, in the Riboroi village District where the island is so narrow that it can be crossed in two hours, we know that trading relations exist between the people of both coasts¹). One might therefore be inclined to suppose that the stone walls and "Einsteinigabel" of the west coast are due to influences of the east coast, though we have no proof for such an opinion. On the other hand, according to the myth, Moroa dwelt first at Mesi and subsequently at Kanam on the east coast, from where he migrated northwards to Lemeris, Kandan Bay, Panagundu, and then further north; and also in the Sigeragun myth the dwelling place Sepka on the west coast precedes that of Tabar Island. It is therefore highly probable that the stone-using immigrants Moroa and Sigeragun, after their arrival near Mesi on the west coast, crossed the

1) PARKINSON 638 277 f.

country, a migration which was greatly facilitated by the narrowness of this part of the island. It is only now understood why they continued their migration in a north-westerly direction.

We are therefore led to the conclusion that, either the Lulura have nothing to do with the stone-using immigrants, that their story is due to a syncretism or, if they really have any connection with the stone-using immigrants, their dwelling places designate halting places in the migration of a second group of stone-using immigrants. In this latter case they must have crossed the north of the island after having landed on the west coast, thereafter continuing their migration along the east coast in a south-easterly direction.

If thus, according to the myths, the stone-using immigrants arrived first on the west coast, these myths agree in the further detail that most of the migrations of the stone-using immigrants Moroa and Sigeragun, and also those of the Lulura, took place on the east coast, whereas their sojourn on the west coast seems to have been of short duration only. This is borne out by the fact that the stone-work of the west coast is very poor, whereas it is highly developed on the east coast. It is very possible that the real reason for this lies in the different possibilities of landing and establishing of habitable settlements on both coasts, for "the whole of the east coast of New Ireland is much more level than the west side, the mountain range is much further inland, and the ascent is not nearly so abrupt as on the west side" ¹⁾).

Tanga group: The Tanga people are but a section of the larger linguistic and cultural unit comprising Anir and particularly Muliama, which latter place as we have seen, is a Tanga colony ²⁾. Trading relations pass through Anir and Nissan extending even to Buka, and trade is also carried on with Muliama and Nokon in South New Ireland, Lihir Island and Tabar Island ³⁾. We are faced here with the same complex conditions as in South New Ireland and which are traceable also in the racial characteristics. The skin varies between very dark brown and a light coffee colour, and the hair is frizzy. There is a very marked physical resemblance with their neighbours of the New Ireland mainland, but on the whole the Tanga people show a greater similarity with the Western Solomon Islanders, particularly with Buka, than do the people of New Ireland ⁴⁾.

As in South New Ireland, the men's houses are surrounded by fences, and not with the characteristic stone walls of the mainland north of Muliama ⁵⁾.

For the celebration of the final funeral rites, a special funeral house

1) BROWN 103 385, PARKINSON 638 276. 2) See also: BELL 63 256, CHINNERY 146 61. 3) BELL 61 86, 64 (1935) 181, 65 108, 68 297, 304, SCHLAGENHAUFEN 819 168 Note 4, 169, FINSCH 236 43, 88f, PARKINSON 630 303 etc. 4) BELL 65 97, 68 298, BURGER 113 163, CHINNERY 146 60. 5) SCHLAGENHAUFEN 820 2.

is built ¹⁾. An alternative to this was the building of a mound about 6 feet high, 100 feet long and 20 feet wide. This mound was termed a *puk nulu*, literally a piece of earth, and on it the usual funeral house was built. The house was surrounded by a barricade of red and yellow shrubs of *dracaena*, and entrance to it was gained over the fork of a tree which was set at the bottom of the small ramp leading to the door of the house. The whole area of the house was regarded as sacred to the members of the clan of the dead person ²⁾. I think we are concerned here with a similar kind of house foundation to those which occur in Likiliki and Lambom Island, the only difference being that there they were built of stones, whereas on Tanga they are made of earth. (The sources of information do not specify the kind of houses that were built upon these stone foundations in Likiliki and on Lambom Island, but their rare occurrence in both these regions makes it probable that they were special houses too). Also the "Eisteiggabel" which we have found in New Ireland as far as Muliama, is found here again.

Stone barricades (called *n'les* on Boieng Island and *lain* on Lif Island) once marked off the boundaries of the land owned by each village, and even to-day relics of these fortifications are still visible beneath the undergrowth. There is a tradition that many of them were erected by a legendary character *Tup-tupa* ³⁾, but unfortunately nothing is recorded about this being. This again points to relations with South New Ireland, for village walls were found on Lambom and in Matakama.

Among the different methods of disposal of the dead on Tanga Island, throwing into the sea of the bodies is used for people of no importance ⁴⁾. A variant of this type of water burial is the building of a cairn of stones in the centre of the reef and the encasement of the corpse within it. The cairn was built at low tide ⁵⁾. This information is of the utmost interest, since what is described here apparently agrees with what has been found to be the custom on Fauro, Choiseul, etc. Here too, we seem to be faced with a kind of artificial island so characteristic of the stone-using immigrants, the only difference being that on Tanga this type of burial is not used for a distinguished person, as is the case in most of the other islands. Are not the stone-works on the shore of Lambom Island and the moles of Muliama and Komalabu perhaps dams connecting similar stone cairns with the mainland, as is the case with many of the artificial islands? Is it not possible that the "bastion"-like ends of these moles had fallen to ruins or had they perhaps been overlooked by the observers because they were so small? A detailed investigation on the spot would be highly desirable ⁶⁾.

1) See BELL 67 325, 329, 332, 334 f. 2) BELL 67 336. 3) BELL 63 262, CHINNERY 146 60. 4) Besides this, earth burial is frequent, and, for distinguished persons, exposure in a canoe in the men's house until the body is decomposed. 5) BELL 67 320-322. 6) Brief mention might be made of the rock pictures which were found in a limestone cave on Boieng Island, Tanga Group, with crude drawings in red dye. They are part of the customs of the present-day inhabitants, who make them as love magic representing the desired woman. BELL 66, 416, 68 80.

Sacred Plants. Around the graves, croton trees (*karon*) are always planted. The rite of the fishing for the soul with a pole to which a bunch of croton leaves is fastened occurs here again; when the pole grew heavy the men concluded that they had ensnared the ghost. Finally this pole was placed beside the grave. It was said that this rite was introduced from Lokon, on the east coast of New Ireland. At the conclusion of peace one of the interested parties held out a certain croton leaf (*a da-mi*); in a war expedition the leader held out towards the victim in such a position that the wind blew towards the victim, a certain magical object screened from his own gaze by a red *anga* leaf (*croton*). If the wind blew towards the performer of the rite, it would bring destruction upon him¹). At the initiation rites, the boys play the noise-making instruments "*kio*"²); in the Tanga colony Muliama, where on such an occasion these "*kio*" are also blown, they are made of a *cordyline* stalk³) and it is therefore probable that this is also the case on Tanga.

Lihir Island: The inhabitants of this island⁴) have founded colonies on the opposite coast of New Ireland, and the trading voyages of the Lihir people to New Ireland cover an area from Kudukudu in the south to Kanabu in the north. Trading relations exist also with Tabar and Simberi Island in the west, and Tanga in the east⁵). The influence of the Solomon Islands can be perceived here; for instance the barrel-shaped roofs of the houses found here point to Buka⁶). Racially, also, some traces of the Solomon Islands are to be found, but the New Ireland characteristics prevail⁷).

Bearing in mind the relations existing between Lihir and that part of New Ireland where the characteristic men's houses fenced in with stone walls and "*Einsteiggabeln*" were found, we might expect to find them also on Lihir Island, and this is actually the case. In many villages of Lihir, SCHLAGINHAUFEN found men's houses (*riri*), or feasthouses (*rarum*) within a spacious rectangular courtyard (*malal*), which was surrounded by a stone wall. Entry was by means of "*Einsteiggabeln*" as in New Ireland. In Lihir, as in New Ireland, ceremonies and feasts were held in these courtyards⁸).

According to a sketch in SCHLAGINHAUFEN's manuscript⁹) the feast-houses which, like the men's houses, also had barrel-shaped roofs, have in the interior a low stone wall (*a uelet*) on both longitudinal sides between the two rows of side posts.

At several places on the east and north coast of Lihir, the natives used

1) BELL 61 84-86, 63 263, 266 f. 2) BELL 62 305 f. 3) KRÄMER-BANNOV 439

269. 4) Most of the data given here are quoted from an unpublished manuscript of Prof. O. SCHLAGINHAUFEN, which he was kind enough to place at my disposal.

5) SCHLAGINHAUFEN 822 25, 61 f, 74, 816 9, PARKINSON 630 261. 6) HAEEL 336 312.

7) BURGER 113 163. 8) SCHLAGINHAUFEN 822 28, fig. p. 9, 25, 85, 87, 816 4-6, 14.

9) 822 fig. p. 25.

overhanging rocks as dwelling places. In some cases, only a bamboo bed is found there, in others there is an entire village ¹⁾). SCHLAGINHAUFEN ²⁾ shows such a place with a bamboo bed under an overhanging rock; the front and the longitudinal side are closed by stone walls (a uelet); a narrow entrance is left at the front.

Banana plantations are fenced in by low stone walls and thus protected against the intrusion of pigs ³⁾).

An upright stone pointed in shape which stood at the road near Cape Zabndun was called by the natives "eudi Zabndun", that is "Penis of Zabndun" ⁴⁾), but we are not told who Zabndun is, or whether the stone was worked. This is particularly regrettable since this information is reminiscent of what was called in Malekula "Penis of the Ambat" and since, apart from the somewhat vague information about Tembin village on the west coast of New Ireland, nothing is recorded about monoliths.

Prehistoric objects. In several villages on Lihir, SCHLAGINHAUFEN found a certain number of stone bowls of human workmanship, the origin of which was not known to the natives. They believed these stone bowls had fallen from the sky. This is borne out by the fact that the name ai kiamkiam is applied to the bowls as well as to the stars. Furthermore, a certain number of stone pestles and other worked stones were found by SCHLAGINHAUFEN, some of which were used in magic by the natives who were ignorant of their origin ⁵⁾).

Tabar Group: The neighbouring Tabar Islands in the west, which comprise the islands Simberi, Tatau and Tabar, agree in all essentials of culture and race, and also show close connection with New Ireland. A Tabar legend confirms the migration of New Ireland people from Lesu to Tabar and their eventual return to their original home, a migration which has already been mentioned in the ogre story of Lesu. The linguistic and general cultural connections between Tabar and Lesu are borne out by this legend ⁶⁾). As we know from the New Ireland myth, Sigeragun went to Tabar, whence he returned later to Mesi, and the stone-using hero Moroa after having come as far as Panagundu, on his migration via Lokon, Lemeris, and Kandau, finally went to the north, on which migration he must have touched the Tabar Islands, since this group is situated north of Panagundu. Marruni, the introducer of the malanggans and other objects into New Ireland, came from Tabar so that, according to this tradition, the mythological place of origin of the malanggans is on the islands of this group ⁷⁾). Trading relations exist between Tatau, Simberi and the New Ireland villages north of Lesu, and between Tabar and the region south of Lesu, as well as between Tabar

1) SCHLAGINHAUFEN 822 27 f, fig. 28. 2) 822 fig. 28. 3) SCHLAGINHAUFEN 822 1.
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and Lihir and Tatau and Lihir¹). Both as regards physique and language the people are Melanesians; they have tightly curled hair; but numerous light-skinned individuals are also found. GROVES has further pointed out the great variety of facial types²).

BÜHLER gives the following description of Tatau Island: "In the center of every village there is a courtyard surrounded by low stone walls about 60 paces long, and half as broad... The men's house stands within it, and in front of it there were five graves, four of women and one of a child"³). So here again we have the typical fenced-in men's houses such as are found in that part of New Ireland with which the Tabar Islands are connected. I am not aware of any mention of the "Einsteiggabel".

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New Hanover: On this island, which culturally agrees with North New Ireland with which it has also trading relations⁶), a great number of very light skinned elements are to be found⁷). A few of the darker skinned individuals can be traced, according to SCHNEE⁸), to people who have drifted ashore from the Solomon Islands.

Near a village situated somewhat inland, a kind of fortification was found consisting of a hill protected by stone walls, which probably served as a refuge in case of danger⁹).

In one of the villages "the ubiquitous variegated coloured ornamental shrub codyaeum variegatum" was found¹⁰).

Duke of York Island: A decision regarding the question of the peopling of this island depends upon the opinion one has about the history of the Gazelle Peninsula, that is to say, whether one accepts the view that a migration proceeded from South New Ireland to the Gazelle Peninsula, or in the opposite direction. PARKINSON, who accepts the former view, therefore thinks¹¹) that Duke of York Island was the first halting place of the New Irelanders on their migration to the Gazelle Peninsula. POWELL and

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overhanging rocks as dwelling places. In some cases, only a bamboo bed is found there, in others there is an entire village ¹⁾. SCHLAGINHAUFEN ²⁾ shows such a place with a bamboo bed under an overhanging rock; the front and the longitudinal side are closed by stone walls (a uelet); a narrow entrance is left at the front.

Banana plantations are fenced in by low stone walls and thus protected against the intrusion of pigs ³⁾.

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RIBBE¹⁾ held that a partial immigration took place from the Gazelle Peninsula on the one hand, and from South New Ireland on the other, and relationship actually exists with both these regions²⁾. Marriage and trading relations also exist with both these regions³⁾. Racially, it is significant that the character of the hair varies from frizzy to almost wavy and that the people vary also in colour, although they are mostly dark brown⁴⁾.

Megalithic stone-work is not recorded on Duke of York Island, but I should like to emphasize that this by no means implies that the region has not been touched by the stone-using immigrants. We have already seen that the problem is much more complicated, and our investigation has shown that for an answer to the question whether a certain region has been influenced by the culture of the stone-using immigrants, a study of the mythology and of possible prehistoric finds is also necessary. The existence or non-existence, or more correctly, the mention or omission of any mention of stone-work in the records, does not give a definite answer to this question of the influence of megalithic culture. This is clearly evident from the very fact that certain wooden monuments also, like the "Gabelholz" and others which equally belong to the megalithic culture, might have rotted away without having left any traces at all.

Sacred Plants. To ward off the disease caused by a spirit (kaja), a certain kind of magic is performed in which a dracaena leaf (tagete)⁵⁾ is used; in a peace ceremony, the two adversaries exchange a dracaena which each plants in his own ground; round a grave they plant "beautiful shrubs and crotons"; before burial, the corpse is bound in a position sitting between "two ornamental plants"; among the ornamental shrubs which are planted in courtyards and gardens there are also crotons, dracaenas, and coleus⁶⁾.

Mythological evidence. According to one story, the god Tiliki created the sun, moon, the earth, trees, the first fire and all other things. He finally also made a woman named Tombuikor by whom he had many children who migrated to many regions⁷⁾. According to another story, a woman created the land and the sea, and a man created all the good and useful things; another man called Totulgo destroyed all things again⁸⁾. The creation of the sea by a woman, and the theme of the two antagonistic creators, seem to indicate the presence of stone-using immigrants. But this question will be discussed later when these same themes have been found in greater detail⁹⁾.

1) POWELL 681 53, RIBBE 715 104. 2) LISSAUER 499 (1901) 382. 3) BROWN 102 397, 105 144 f, SCHNEE 837 44, PARKINSON 630 47, PFEIL 656 123, RIBBE 715 152 f, 161, etc. 4) RIBBE 715 105, BROWN 105 145. 5) In New Ireland "tagete" is recorded as the word for "cordyline". 6) MEIER 554 1026, BROWN 103 195 f, 104 307 f, DANKS 180 349, SCHMIDT 835 180, RIBBE 715 91, 132, 150, 308 f. 7) BÖRNSTEIN 86 244; regarding the story of the creation of man see also: BROWN 103 199. 8) RIBBE 715 143. 9) Regarding the problem of the two moieties Maramara and Pikalaba, which occur here as in South New Ireland and the Gazelle Peninsula, see: RIVERS 725 II 500 f, PARKINSON 630, 612, 641 209 f, BROWN 105 146 f, 149, etc.

Vuatom Island: In race and culture the inhabitants of this island resemble those of Duke of York Island and the other neighbouring regions. Trading relations exist with Nakanai, the Gazelle Peninsula, and Duke of York Island¹⁾.

At a certain place on the island there is a stone called a vatapir, that is, the stone of Pir, a mythical being. MEYER²⁾ gives the following description of this stone: "Es ist ein meterhoher Basaltblock mit vorne senkrechter



Fig. 18. The stone of Pir, Vuatom Island (after MEYER 563 723).

Fläche, auf der nebenstehende Zeichnung, die bei den Malereien der Eingeborenen häufig wiederkehrt wie eingemeißelt ist". In one of the myths it is said of a child: „Und es schnitt hinein in den Sagenstein"³⁾.

Now, the question arises is this a hewn stone erected intentionally, or is it a natural rock bearing certain carvings? Neither from the written account nor from the drawing is this clear. More detailed information is required before an answer to this question is possible.

Before the celebration of a sun feast, the path leading to the place where the feast is to take place is cleaned. "The men follow the road always used since olden times and walked upon only on this occasion. No tree or shrub borders the road, but on both sides of it there are numerous stone blocks due to former volcanic eruptions", as MEIER⁴⁾ puts it. This information also lacks clarity: stone blocks lying on both sides of a road can hardly owe their position to volcanic action alone. Is this perhaps one of those avenues such as we found in the New Hebrides, Saa, and Ulawa, which were bordered by monoliths or flagged with stones? On this point too, we need further information.

Sacred Plants. *Dracaena* leaves are frequently used in magic, thus for instance, in the magic over fish traps (in this case the variety *manara vaila* is used) the spell pronounced over them runs: "Dracaena leaf drive the fishes in". When, before the submerging of the fish trap the spirits

1) MEIER 548 711, MEYER 562 267 f, 257 f, 265 f, 565 1102, PARKINSON 630 104, FINNICH 236 480 etc. 2) 563 723 Note 4. 3) MEYER 563 722, fig. p. 723. 4) 548 716 f.

of the dead are invoked for success, dracaena leaves are thrown into the sea, and dracaena leaves are also used in the magic over the stone anchor; besides a small fish, dracaena leaves also (togeta kuabari, totogeta) are used as bait. If by inadvertency a fish trap falls to the ground it is beaten with a branch of *erythrina indica* (balubalu), otherwise no fish would come to it in the future. An *evodia* shrub (lomo) is set on the float and dracaena leaves are also fastened to it¹).

Prehistoric Objects. Numerous prehistoric potsherds and a number of stone knives were found on Vuatom. Many of the potsherds were richly decorated. The natives knew no more about these "stones" than that they probably owe their origin to the mythical Pir, to whom also the stone previously mentioned was attributed²). Unfortunately nothing is recorded regarding the method by which these potsherds are made. Stone pestles have also been found on Vuatom³).

Mythological evidence. Pir, to whom the upright stone and the prehistoric potsherds were attributed, is a mythical being, to whom everything owes its origin⁴. Unfortunately, nothing else is recorded about Pir, so that we are unable to decide whether he was a stone-using immigrant or not.

We shall now discuss the myths of the two antagonistic brothers To Kabinanai and To Karivuvu, the first of whom is skilled and clever whereas the second is unskilled and stupid⁵). In the discussion on New Ireland it has already been stated that RIVERS identified Soi with a people of immigrants, and Tamor with the aborigines. RIVERS has further pointed out that Soi is identical with To Kabinanai of the Gazelle Peninsula and the neighbouring regions, and that both are representatives of the immigrants in this region. Whereas we shall show that To Kabinanai belongs to the stone-using immigrants, that is, to a group which, according to RIVERS, forms part of his "kava-people", RIVERS himself thinks that Soi, Kabinanai and the analogous beings are representatives of those immigrants who, by intermingling with the aborigines, constituted his "dual-people", that is, a culture which, according to RIVERS' reasoning, preceded that of the "kava-people". It must moreover be remarked that the mythological characters of the New Hebrides, Qat, Marawa, Tagaro and Subwe, were also attributed by RIVERS to the "dual-people"⁶), whereas this study has clearly shown that Qat, Tagaro, etc. are identical with the Ambat, and that all of them are representatives of the stone-using immigrants. Our view is further supported by the following facts: The Maramara moiety of which Soi of New Ireland is the head, is connected with the light-coloured coconut, a fact which allies its members to the stone-using immigrants Atawa. On the other hand, Tamor, the head of the Pikalaba class, is associated with the dark coconut. The

1) MEYER 565 98, 100, 104, 330, 334, 335, 338, 1071, 1085. 2) MEYER 564 251 f, 1093-1095, SCHURIG 841 34. 3) PARKINSON 630 559 fig. 100. 4) MEYER 548 710 Note 1. 5) See: MEYER 563 715 f, 565 86 f. 6) 725 II 421 f.

association of To Kabinana and To Koruvuvu with the two moieties occurs also in some regions of the Gazelle Peninsula. In some of its districts the highly interesting information is furnished that the ancestress of the one moiety who sprang from a light-coloured coconut "had on that account a correspondingly light complexion", whereas the ancestress of the other moiety who sprang from a dark coconut, "had a correspondingly dark skin colour" ¹). RIVERS has interpreted this as representing two peoples, the one dark, and the other the light-skinned immigrants ²). The light-skinned people RIVERS considers as the first Austronesian immigrants, who, by union with the aborigines, constituted the "dual-people", whereas in our opinion they are the stone-using immigrants who racially were particularly characterised by their light skin. The association of To Karuvuvu with the dark-skinned people was considered by RIVERS as a proof that the stupid antagonistic brother represented the aborigines. Against this, however, stands the fact that in the numerous cases in which the two antagonistic brothers or culture heroes had been found, it had been possible to identify them with the stone-using immigrants, whereas the association of the stupid antagonistic brother or culture hero with the aboriginal population is by no means manifest from the Melanesian evidence. This antagonism was found in connection with Qat and Tangaro Loloqong (Banks Islands), Tagaro-Tagaro lawua and Suqe (Aoba), Tagaro-Suqe (Pentecost), Bar-kulkul-Marrélül (South Pentecost), Ambat-Awirara (Malekula), Smösb-gaivis-Nembalangk (Uerik, Malekula), Taghar's two sons (Vao), Jotab-Vyu Bungbung (Ambrym), Mosigsig and his brother who spoiled his island (Santa Cruz), between Warohunuga, the Qat of San Christoval, and his brothers, the "Delectable Lizard" and the men with his father (Saa), Kugui and Okeru (Bougainville Straits), etc. Therefore, as has already been pointed out, we are of opinion that as a whole the story of the antagonistic brothers belongs to the mythology of the stone-using immigrants, at least as far as the greater part of Melanesia is concerned. If RIVERS is right that the first Austronesian immigrants, by their union with the aborigines, constituted the "dual-people", this according to our reasoning would mean that the megalithic immigrants by their contact with the aboriginal population constituted the dual organization, since we can show the first Austronesian immigrants to be our megalithic people.

This agrees in fact with ELLIOT SMITH's view that the dual organization was carried about the world by highly civilized peoples whose ruling classes were similar to the Araha of San Christoval. RIVER's and SMITH's views can be conciliated when—as is in fact possible—the kava-people are shown in no way to be connected with the stone-using immigrants. We

1) MEIER 552 2, 546 16, 22 f. 2) 725 II 560; the opinion of P. W. SCHMIDT that the light and dark coconuts represent phases of the moon is rejected by RIVERS, and we have already stated that we do not accept the astral-mythological interpretations of the culture heroes.

shall, however, not continue the discussion on the constitution of the dual organization.

The reasons in support of the view that the antagonistic brothers are representatives of the stone-using immigrants will be clear from the following myths of To Kabinanai and To Karivuvu.

The brothers To Kabinanai and To Karivuvu, and the orphan To Natnangur were caught with a cord by To Konokonongiange. Whilst the latter and his wife went away to fetch bananas, To Natnangur untied the knot by magic. Then they went away and climbed up a coconut tree. The ogre and his wife tried to climb after them to capture them, but To Natnangur caused them to fall down by throwing down coconuts ¹⁾.—This agrees with the many ogre stories and the escape up a tree from the pursuing ogre. In this way Qat fled before Qasavara (Banks Islands), Matiktiki and the white children in Tanna, as did also Moshikshiki of Futuna and Aniwa, the two children in Malaita and a man with a woman in the Buka Passage, the latter climbing up into the sky.—Then Konokonongiange and his wife tried to make the coconut tree fall by digging it out, but To Natnangur by magic makes it fall into the sea. The three had previously made for themselves canoes out of coconut blossoms in which, after the fall of the tree, they went away to another country ²⁾. The ogre and his wife were unable to follow them.—In a similar way the stone-using immigrant Magoana of Eddystone made his canoe out of a banana spathe; Mosigsig of Santa Cruz made his out of a rotten hollow bread-fruit, and the building of a canoe was also one of the characteristic activities of the culture heroes of the New Hebrides. The departure to another country has moreover been seen to be one of the most typical events associated with the stone-using immigrants.—On this voyage, To Natnangur is eaten by a shark. His head, which remained afloat, was fished up by his sister who buries it. From this head sprang the first coconut palm ³⁾. This last incident has been encountered so frequently in connection with the stone-using immigrants that there is no need to lay further stress upon it.—To Kabinanai and To Karivuvu also made the sea which was originally just a small pool. They cut this pool through thus creating the sea. They further made canoes in which they journeyed to different countries. To Karivuvu made the islands, and To Kabinanai made the mainland. To Kabinanai also wished to make Vuatom Island a good island, but To Karivuvu got the start of him, and made the island stony. This made To Kabinanai very angry, so he went away to a far remote country where he created shell-money ⁴⁾.—Here we find together three of the characteristic incidents so often associated with the stone-using immigrants: the creation

1) For a similar theme in connection with Konokonongiange see also MEYER 563 725-727, and MEIER 546 175-181, where this story is related from the Gazelle Peninsula. There it is the grandmother of To Karivuvu and her grandchild who flee before the ogre. 2) MEYER 562 259. 3) MEYER 563 717-722.

of the sea, the creation of islands and the final departure.—To Kabinanai ordered To Karivuvu to make a fish basket. But the latter threw stones and his spear at the basket and destroyed it. Then the myth relates that To Kabinanai is a skilled fish basket-maker, but that To Karivuvu is unskilled. "The natives do not know anything regarding the origin of fish baskets" ¹).—It may be asked whether this version does not perhaps reveal the existence of a more complete story which attributed the creation of the fish traps to one of the two brothers. If this were so, it would establish their relationship to Soi of the Bougainville Straits and to Sikodo of New Ireland whose possible association with the stone-using immigrants has already been discussed. In the Gazelle Peninsula where the same story is known, To Kabinanai is actually said to be the inventor of the big fish traps.

The myth according to which the people fled to Laur from a fishhawk (Pandion leucocephalus, taragau) who killed all people is also known on Vuatom. Only a pregnant woman in spite of her entreaties is left behind by the departing people. She bears twins, who kill the man-eating fish-hawk. They send a token to Laur, whereupon the refugees return. Then the two brothers marry ²).—This theme agrees completely with the story of Tsenabonpil of Lesu, Morena of the Buka Passage, and the numerous other stories whose association with the stone-using immigrants has been shown.

Gazelle Peninsula: The inhabitants of this region are Melanesian in language and race, with frizzy hair and dark brown skin; they show also some racial influence of the Baining ³). Most authors are of opinion that the peopling of the Gazelle Peninsula took place from South New Ireland via Duke of York Island ⁴); only a few maintain the view that it took place in the opposite direction ⁵). From the very intensive and, as he thinks, old trading relations of the Gazelle Peninsula with Nakanai ⁶), MEIER ⁷) has drawn the conclusion—which is, however, peculiarly his own and is not confirmed by any other writer—"that the peopling... took place from Nakanai along the west coast of New Britain to the north-eastern part of the Gazelle Peninsula, from there to Mioko, Ulu, Duke of York Island, and finally to New Ireland. A migration backwards might have taken place from there to the north-eastern part of the Gazelle Peninsula, but its original peopling could not have taken place in this direction". The influence from the Solomon Islands which can be felt in the eastern part of the Gazelle Peninsula has

1) MEYER 565 86 f. 2) MEYER 563 727-729. 3) THURNWALD 881 111, BURGER 113 105, 114 7, KLEINTITSCHEN 432 32, 164, MEIER 550 115, ZÖLLER 989 369. 4) PARKINSON 630 47 f, 259, BURGER 114 7 f, 113 104, KLEINTITSCHEN 432 29 f, GRAEBNER-STEPHAN 300 184, FOY in PARKINSON 634 6 f, NEVERMANN 611 82, RASCHER 687 280, etc. 5) PFEL 656 114, 286 f, 927, 655 73 f, POWELL 680 52 f, see also the resumé given by FOY in PARKINSON 634 6 f, and GRAEBNER-STEPHAN 300 167 f; see also the myth recorded by BLEY 82 199. 6) HEES 348 37, however, doubts the antiquity of these trading relations. 7) 553 837 f.

been pointed out by PARKINSON¹⁾, and, according to POWELL, the inhabitants of this district have even immigrated from the Solomon Islands²⁾. WEISSER³⁾ has expressed the opinion that a migration took place from the Gazelle Peninsula via South New Ireland to the Solomons and the New Hebrides. The trading relations of the coastal district extend particularly to Nakanai, and even as far as the Willaumez Peninsula and in an eastern direction as far as the Birara District. They have relations with the Baining by trade and war, and trading relations exist with Vuatom, Duke of York, and South New Ireland too⁴⁾.

No stone-work has been recorded in the Gazelle Peninsula. PFEL⁵⁾ gives the following interesting account: "On the Gazelle Peninsula I made the acquaintance of a chief who had made near his village a broad, straight avenue about 100 metres long and 4 metres broad, bordered on each side by many different crotons of variegated colours. The broad space between these borders was used especially for dancing". This information is confirmed by KLEINTITSCHEN who says⁶⁾ "For the performance of dances the chiefs construct long avenues near their villages planted on both sides with croton and dracaena". These are obviously reminiscent of the avenues of Vuatom, the Solomon Islands and the New Hebrides, along whose borders sacred plants were also planted by the side of, or instead of, upright stones, but the information is too isolated to entitle us to draw any definite conclusion.

Sacred Plants. We have a great deal of information on this subject. A dancing ground is surrounded by dracaenas; the messenger of a chief bears a dracaena in his hand; a wooer brings a dracaena to the family of his intended bride; to make oneself invisible to a pursuer, a certain kind of magic is made with a dracaena; to drive away evil spirits, the magician brandishes a certain kind of dracaena (*pal a kada*); a bunch of dracaena hung round the neck protects the wearer against injuries in war; the following varieties of dracaena are particularly efficacious: *mette*, *tikua*, *mette karau*, *tokabangia* and *rangiene*⁷⁾. For the initiation into the *e magit* sorcery, dracaena leaves are used; as a taboo sign a dracaena is used; the huts in which the dead are buried are decorated with plants, the dracaena, among others. If shell-money is transported from one place to another, the carriers are often preceded and followed by boys holding in their hands dracaena plants. "This goes to show the veneration in which the Gunantuna hold their money". To cause a volcanic eruption to cease, a certain magic is made with a dracaena. Dancing grounds are decorated both with dracaena and croton and both these plants are cultivated for decoration purposes;

1) 630 48, 633 12, GRAEBNER-STEPHAN 300 184. 2) POWELL 680 194, 215, 681 170 f. 3) 929 278. 4) KLEINTITSCHEN 432 91, KROß 442 188, HERNSHEIM 356 99, MEIER 554 1006, 552 11, RASCHER 687 224, 276, BURGER 113 106, PFEL 656 110, 123, PARKINSON 630 86, 159, 297, etc. etc. 5) 656 36. 6) 432 45. 7) A certain variety of dracaena is called "tagete" by the Gunantuna; MEIER 551 50 f.

dancers are decorated with leaves of croton and dracaena; on the occasion of an offering to the dead, or to a kaja, dracaena and croton are planted; around the houses croton and other ornamental shrubs are planted; croton is planted upon graves, and in sorcery croton is also used. In love magic *evodia hortensis* (lomo) is used, and this is also the favorite plant of the beneficent spirits "inal". In war magic, cordyline leaves are used; in front of the men's house a cordyline is planted "which is used in connection with almost all the magical rites of the Kuanua people" ¹).

Prehistoric objects. In the district inhabited by the North-west Baining, the following objects were unearthed: stone balls (St. Paul), stone pestles (Vuna Galip, Cape Lambert, Nambung River), stone mortars (Vuna Galip), and one stone bowl with foot near Mt. Varzin ²). The objects which are made of granite or greenstone were not used by the Bainings who were unable to furnish any information whatsoever regarding them. BURGER ³) makes the following remark: "If it is borne in mind that the languages of the coast people of New Britain show a certain resemblance with the Malayan and Polynesian languages, the opinion seems to be justified that the Polynesians on their way to the eastern islands, touched New Britain, and that they dwelt for a longer time in some districts of these islands... The migration cannot date very far back, since, in the case of the objects found, the greenstone, which generally becomes quickly weather-worn, showed only faint traces of exposure to the weather".

Mythological evidence. In the coastal regions of the Gazelle Peninsula the two antagonistic creator brothers are well known again; they are called To Kabinana (or To Kabana) and To Korvuvu (or To Karavo, To Porugo, or To Purukelel), according to the district. They are the creators of the world. Here again, the wise To Kabinana created everything good in the world, but the stupid To Korvuvu created all the evil ⁴). Once To Kabinana and To Korvuvu went out to sea in their canoe "to fish up

1) BÄSSLER 36 360, BROWN 103 100, KLEINTITSCHEN 432 45, 149, 433 279, 323, 347, 450, PARKINSON 630 69 f, 131 f, 150 f, MEIER 547 97 f, 104, 549 289 f, 688, 690, 552 12, 554 1019, 1021, TREVITT 899 351, BURGER 114, 16, 22, WINTHUIS 963 932, FINSCH 236 344, 238 1 93, 10, 112, PFEIL 656 79 f, 657 189, POWELL 681 35 f, NEVERMANN 611 98, DANKS 180 349; for information regarding the ritual use of "Zierpflanzen" see: KLEINTITSCHEN 432 65, 166, POWELL 681 158, MEYER 565 106, MEIER 549 7, 691, 701, 702, 550 113, 553 861, 863, PARKINSON 630 92. 2) BURGER 114 2, Pl. I, PARKINSON 630 fig. 99, p. 557, BUSCHAN 177 118, BLEY 83 525, fig. p. 525; see also KROLL 442 196, who classes with these prehistoric objects certain Inlet figures and a stone mushroom pictured by BROWN 102 Pl. p. 234/235. 3) 114 3. 4) PARKINSON 630 683 f, KLEINTITSCHEN 432 331 ff, DANKS 179 452, BROWN 102 355, MEIER 549 304 f, 551 39, 546 15 f, 27-30, 37-81; the story of the origin of death which is known here agrees with that of Vuatom Island, see: MEIER 546 19, MEYER 563 724, KLEINTITSCHEN 432 334, PARKINSON 630 683 f, the only difference being that here it is To Kabinana or, according to another version, To Korvuvu who brings death into the world, whereas on Vuatom it is Konokononmiange, who, it will be remembered, was associated with the two brothers.

islands. After having fished up Vuatom, Urara, Massava, Massikonapuka, and the other little islands, they disappeared and were never seen again" 1). This fishing up of islands and their final departure equates these two antagonistic brothers to the many other culture heroes of the stone-using immigrants whose stories relate these two incidents with striking similarity.

The story of Natnangur of Vuatom who was closely associated with the two brothers, who was eaten by a shark and from whose head sprang the coconut tree, is also known in the Gazelle Peninsula. There is, however, one remarkable point of difference in the Gazelle Peninsula story in that the being whose body is eaten by a shark and from whose buried head springs the coconut tree, is the son of To Kabinana 2). The close connection of the antagonistic brothers with the stone-using immigrants thus becomes still more apparent.

It has been said that To Kabinana was considered to be the inventor of the big fish traps, and the story of the destroying of the traps by To Korvuvu, current in the Gazelle Peninsula 3), agrees with the Vuatom version. As we have seen, the connection with Soi of the Bougainville Straits and Sikodo of the Buka Passage is in these circumstances quite probable. We are thus in the presence of so many characteristic mythological themes that we cannot but conclude that the two brothers were in fact stone-using immigrants.

According to one myth, the mother of To Kabinana and To Korvuvu lived in a cavern, hidden from a wild boar which ate the people. She scratched her right arm and from the blood arose To Kabinana; then she scratched her left arm and from the blood arose To Korvuvu 4). She made weapons for her sons with which they killed the wild boar 5). Although in this myth the flight of the other people is not mentioned, it is apparent that it is identical with the numerous myths of the woman left behind all alone, and whose sons kill the man-eating monster. It has already been established that the characters in these myths are representatives of the stone-using immigrants.

According to another myth, To Kabinana once sent his brother To Korvuvu for water. Having taken the water, To Korvuvu bathed in the sea and a clam shell bit off his head 6). This highly characteristic theme of the clam shell appears with still greater clearness in another version, which relates that To Kabinana tinted his hair with a beautiful dye which his brother To Korvuvu also wishes to possess. To Korvuvu therefore asks his brother

1) KLEINTITSCHEN 432 336, MEIER 546 47 ff. 2) PARKINSON 630 685 f. 3) PARKINSON 630 689 f, MEIER 546 57 ff. 4) This theme of the origin of a human being created from the blood occurs frequently in Melanesia, for instance in Maevu, COBRINGTON 160 406 f, LESSU, POWDERMAKER 678 251, 274 f, and at several other places. In our present myth this origin is apparently only a local version of the asexual conception, frequently found in the analogous myths. This latter point is in itself certainly not without interest. 5) MEIER 546 25 ff. 6) MEIER 546 41.

how he could procure it for himself. To Kabinana, who had actually brought this colour from the forest, wishing to deceive his brother tells him: "Look for it, it is in the sea, it glitters brightly, it is a clam shell. Put your head in it". This To Koruvu did and the clam bit off his head and killed him ¹⁾. This story of the clam shell has been encountered, with striking similarity, in connection with the stone-using immigrants Ambat (Malekula), Mosigsig (Santa Cruz), Warohunuga (San Christoval), "The Delectable Lizard" (Saa) and Sina Kwao (Malaita). That it appears here in connection with To Kabinana and To Koruvu is further proof that these two brothers also are representatives of the same stone-using immigrants.

The following myth agreeing with the story of the creator Taliki and the woman Tomboikor of Duke of York Island is recorded in the Gazelle Peninsula, and relates the typical deeds of creation which we have attributed to the stone-using immigrants. The woman Tabui Kor had two sons, Tilik and Tarai ²⁾. The woman made the land and the two men worked it. Once the two men discovered that the woman urinated into their food whereas she put pure sea-water into her own food. This discovery made the woman so angry that she rolled away the stone which had hitherto kept the sea confined, and the sea poured out. They afterwards took pieces of earth and sprinkled them on the sea and other islands came up. Then they sprinkled this also on the land, and trees, animals and men grew ³⁾. In another myth it is related how To Kabinana went out to sea "and he extended the sea by remaining a long time on it, and the sea became big" ⁴⁾. In this myth the actual creation of the sea is thus characteristically attributed to To Kabinana, as in the numerous myths of Melanesia in which the stone-using immigrants were described as the creators of the sea.

The theme of the catching of the sun with a sling, so characteristic of the Polynesian Maui myths, occurs here also. But here the man kills the sun and is thereupon himself killed by another sun ⁵⁾. A myth of two boys who are swallowed up by a fish from which they cut themselves out again, is also recorded here; in another version of this story a man is swallowed by a snake. This incident has been found in connection with Warohunuga (San Christoval), "Born by the Side of a Bow" and "The Delectable Lizard" (Saa), Kamakajaku (Isabel) and Okeru (Bougainville Straits). In our present story, however, the characters show no further similarities with these beings ⁶⁾. It is perhaps significant that the grandmother of To Koruvu, who is swallowed by Mekanakonom, cuts herself out of his body again ⁷⁾.

For all these reasons it is highly probable that the Gazelle Peninsula was

1) MEIER 546 49 ff; another version (MEIER 546 185-195) relates this incident of To Kabinana's sister, her husband and another man. 2) Tolik and Torai, according to PFEIL 656 138. 3) BROWN 102 354 ff, PFEIL 656 138, POWELL 681 149, MEIER 546 107 ff. 4) MEIER 546 49. 5) MEIER 546 133-137. 6) See: MEIER 546 195-203. 7) MEIER 546 175-185.

touched by the stone-using immigrants, although there is no megalithic stone-work there now. It is improbable, however, that the sojourn of the stone-using immigrants in this region was of more than brief duration. Racial conditions also seem to confirm such a supposition, since nothing is recorded here about the light-skinned elements which are still recognizable to-day in many of those parts of Melanesia influenced by the stone-using immigrants. It has been mentioned that, racially, Baining influences also left their mark on the coastal region of the Gazelle Peninsula; it is therefore quite possible that the influence of the primitive Baining counteracted the development of the culture of the stone-using immigrants, and likewise opposed a longer sojourn of these invaders. In spite of the various and intensive relations between the Melanesian inhabitants of the coast and the Baining, a quasi-permanent state of war exists between these two peoples and has never really ceased. It is therefore not unreasonable to suppose that similar conditions existed at the time when the stone-using immigrants arrived. On the other hand, the vestiges of the stone-using immigrants have certainly been overlaid by the later coming Melanesians, who to-day, are the prevailing element in this area.

Baining: It is well known that this people, who speak a Papuan language, are racially the most primitive type of the whole of Melanesia ¹⁾.

Not the slightest trace of megalithic stone-work is found in their district, and it is accordingly highly significant that nothing is recorded of a ritual use of sacred plants. But there cannot be any doubt that the Baining region has also been influenced by the stone-using immigrants, as is evident from the prehistoric objects found in their district. From the existence of the Hareicha dances, RIVERS has concluded that more recent cultural influences must have been at work here. He says ²⁾: "If Father Rascher is right in supposing that the dances commemorate the dead ³⁾ it will become probable that they are due to the settlement of a body of the kava-people, or their near descendants, who failed altogether to introduce their language... The ideas of the Baining concerning death make it more probable, however, that the dances have been derived from some later movement, and were adopted with little appreciation of their real meaning". However this may be, it is certain that the mythology too shows more recent influences. The North-west Baining have a myth according to which the sea was created by a woman in a similar manner to that described by their Melanesian neighbours; also the story of the springing of the coconut out of the skull of a man is known here. Numerous are the stories of the wise Sirini and the

1) RASCHER 686 138, 687 205, 264, 284, 309, KLEINTITSCHEN 432 248, BURGER 114 47 f, THURNWALD 881 110, PÜCH 677 612, RIVERS 725 II 498, 541, PARKINSON 630 202, KRÄMER, 438 17, SCHMIDT id MÜLLER 591 254 etc. etc. 2) 725 II 542. 3) See RASCHER 687 190, 192, PARKINSON 630 620; the same opinion has also been expressed by BURGER 114 67, 144.

stupid Goatkium, reminiscent of the antagonism of To Kabinana and To Kōrvuvu.

Another story relates the existence of a wild dog who ate all the people. Only a pregnant woman who hides in a hollow tree, escaped. She bears a son, who kills the dog, and brings the dead back to life again¹⁾. This is obviously identical with the numerous analogous stories mentioned, whose association with the stone-using immigrants has been pointed out.

Sulka: The Sulka, who inhabit the east coast of New Britain, are racially Papuans²⁾ and speak a Papuan language³⁾. Besides this, Melanesian influences are also clearly evident in the race, language and general culture⁴⁾, so that, as NEVERMANN puts it⁵⁾: "We cannot consider the Sulka as Papuans, but as a people which, originally Papuan, and strongly influenced by Melanesians in race and culture, has become a mixed people". Trading relations do not seem to be extensive and exist more particularly with the neighbouring Tumuip and Mengen⁶⁾. The probable influence of the Solomon Islands upon the east coast of New Britain has already been pointed out, and it is remarkable that the Sulka possess the plank-built canoe (mon)⁷⁾.

From the ship, RASCHER saw a village on the south coast of Wide Bay. In this village, the gardens "were intersected by stone walls and fences at little distances, probably to prevent the fertile humus being washed away by heavy rains"⁸⁾. As far as I know, this information is not confirmed by any other writer.

The usual mode of treating the dead is to bury them within the house in the sitting position with the upper part of the body above the ground. A small tower-like structure covered with banana leaves is placed over the head. Stones are laid round the little tower and a fire is kept burning close at hand. When the flesh has decayed, the bones are hung in the house⁹⁾. From this, RIVERS has drawn the following conclusion: "It is evident that, if the sitting position is a relic of the culture of the dual-people, there have been later influences which have led to the preservation of the bones and other features of the death rites. The men's house, the masks and the wooden gong suggest the presence of the kava-people, and the use of betel, and the evident importance of blackening the teeth... show the influence of the betel-people.... In this connection it is significant that the Sulka should place stones round the tower.... It seems possible that the tower, the care taken

1) BLEY 82 198-203; see also the story p. 201-203, which resembles the usual ogre stories; see also p. 203 ff, 429-431. 2) PARKINSON 630 203, BUSCHIAN 117 50, 134. 3) SCHMIDT 834 79, MÜLLER 591 254, PARKINSON 630 202, RIVERS 727 II 498, 537, SPEISER 798 133, 136, GRAERNER-STEPHAN 300 191, 711 III 522. 4) PARKINSON 630 768, KLEINTITSCHEN 114 164. 5) 611 118. 6) RASCHER 688 203, 213. 7) PARKINSON 630 241, VOGEL 911 163, FINSCH 236 480. 8) RASCHER 687 318. 9) RASCHER 688 215.

to prevent earth from touching the dead, the stones, and the fire may have been derived from the people I supposed to have introduced ... the construction of monuments of stone into Oceania" ¹). I do not wish to discuss here RIVERS' theory that the many objects enumerated belong to the culture of the stone-using immigrants. It must, however, be emphasized that burial in the sitting position with the upper part of the body above the ground, attributed by RIVERS to his "dual-people" has been found by us to be the characteristic mode of burial of the stone-using immigrants. If RIVERS is right in his other conjectures, this type of burial with its use of stones would, in particular, be proof of the influence of the stone-using immigrants on the Sulka.

Although the culture of the Sulka is not so well known, we can nevertheless adduce further facts in support of the view that they were influenced by the stone-using immigrants.

Sacred Plants. If it is suspected that a garden has been bewitched, a man with a certain dracaena variety (a kapirop) ²) in his hands jumps about on the ground and shouts; this is thought to render the witchcraft ineffective; dracaena is also used in love magic; in the ceremonies which follow circumcision, dracaena leaves are used; a bride is decorated with branches of dracaena and croton. After the death of a man, a divination rite is performed to discover the sorcerer responsible for his death; for this an erythrina (guip) is used. A newly built house is decorated with "Zierpflanzen" and with these also the house posts are beaten. In a coastal village south of Turner Point, variegated coloured plants were planted in the centre of the village ground ³).

Mythological evidence. Once there lived two brothers bearing the same name. Nut vulau (Nut the older) had two wives and many people; the other, Nut sie (Nut the younger) was unmarried and lived with his grandmother Tamus. He had but ten people. Once he happened to meet his brother's wives and had intercourse with them. He then painted their genitals with a certain pattern. Once when one of the women sprang over a fence, the elder brother discovered her pattern and became suspicious. He commanded white coconuts and new unpainted waistcloths to be brought. Then he gave a nut and a waistcloth to everybody, ordering them to make a drawing on both of them. The drawing made by his brother agreed completely with that of the two women and Nut vulau thus recognized the

1) RIVERS 725 II 539 f, has identified this tower with the kinao towers of the Inlet Society, and these latter with the pyramids of the Polnesian Marae and the Fijian Nanga. In this I cannot, however, follow RIVERS, since pyramidlike structures having various uses and meaning, are not infrequent in Melanesia, and have no connection with megaliths. The exterior resemblance alone is not sufficient to justify the supposition that such connections exist. 2) Another dracaena variety is called a nhep (sing.), o nhek (plur.); MÜLLER 592 79. 3) RASCHER 688 211, 213, 217, 222, 225, PARKINSON 630 179, 182, 189 f, 196, EICHHORN 220 206, POWELL 681 101.

culprit. Now Nut sie and his people made good shields with handles, but Nut vulau and his people were unskilled, and their shields were inferior and had no handles. So they fought, and Nut vulau was defeated. After this, Nut the younger left and, with his people, migrated to another place. From there in the form of a great bird he flew to his brother, made off with one of his wives and married her ¹⁾. The grandmother Tamus created the sea. She covered it with a stone to keep it secret. But her two grandchildren soon discovered that her food tasted better, since she prepared it with seawater, so they intercepted her when she went to the sea. When she saw that she was discovered she called out: "Now the sea will kill all of us". Then the sea flowed out in all directions ²⁾.

The woman Tamus appears also in the following myth: There were two ogres in one place, Kanmameing and his wife Lelmul who ate the people. So the people decided to emigrate and took to their canoes. The woman Tamus was pregnant, and in spite of her entreaties the departing people did not want to take her with them. So she went back to the shore, where she bore a son. Once when she went to work she gave her son a dracaena (pupal) to play with during her absence. The boy looking at the dracaena asked himself whether he should create a brother or a cousin out of this dracaena, and he decided to create a cousin. He kept the dracaena behind him and when he looked back he saw a beautiful boy. He called him Pupal, since he had originated from a pupal. The two boys built a dwelling house for Tamus and then a men's house for themselves. They made weapons and finally killed the two ogres, informing the people of this whereupon the people returned to their old home ³⁾.

Another story also speaks of two brothers. Although we are not expressly told that these brothers are the same as those in the preceding myths, this is, however, very probable. The younger brother was very skilled and, by magic, was able to change himself into a cockatoo. The elder, however, was a boaster who knew nothing of magic. Near their village there lived a couple of old ogres whose hut stood under a coconut tree. Once, the younger brother whose name was Vlakas, changed himself into a cockatoo and flew to the coconut tree. He bit off a coconut and let it fall down upon the ogres' hut; then he changed again into a man. The ogre, furious, climbed up the coconut tree, but when he came near, Vlakas thrust him down. The female ogre thinking it was the man, devoured her own husband when he fell down. Then Vlakas changed again into a cockatoo and flew away. The elder brother who wished to do the same, also climbed the coconut tree. Everything happened as before, but since he knew no magic the ogress climbed the coconut tree, seized him, drew him down and was about to devour him. In the meantime, however, Vlakas had assembled all the animals of the forest,

1) RASCHER 688 229 f, PARKINSON 630 695-698. 2) RASCHER 688 230, PARKINSON 630 698. 3) RASCHER 688 230-232, PARKINSON 630 699-703.

and when he saw that his brother was in danger he ordered all the animals to rush upon the ogress, so that the ogress ran away. Then the two brothers took the big pig belonging to the ogress and went home with their booty ¹⁾.

If we analyse these stories, we come to the conclusion that they are variants of the Qat story: the story of adultery with the brother's wife and the fight resulting from it, occurs here again, as in the stories of Qat, Barkulkul, Ambat, Kugui, etc. The discovery of the adulterer by means of the pattern agrees with the story of Barkulkul of South Pentecost, who ordered his brother to make a drawing in the sand, which agreed with the rattan knot used by Barkulkul to fasten the door of his wife's house resulting, there also, in the discovery of the adulterer. The creation of the sea by the old woman is identical with the numerous stories mentioned. It has been shown that this old woman belongs to the stone-using immigrants, and since this woman is said to be the grandmother of the two brothers, their connection with Qat, Ambat, etc. becomes increasingly evident. That Tamus, and therefore the two brothers, were stone-using immigrants, is further supported by the story of the pregnant Tamus who cannot follow the fleeing people, and whose sons kill the ogre, since these themes have been frequently found in connection with the stone-using immigrants; Tamus' son, by means of a dracaena, creates a man which equates him to Qat who also created a man with a dracaena (Gaua Island), and it further equates him to Koevasi, the wife of Sivotohu the culture hero from the sky in Guadalcanar, and to the culture heroes Tzatza and Tzili, who brought forth man by planting a cordyline. That the two boys, the children of Tamus, built a men's house, is in accordance with RIVERS' view that the existence of the men's house is due to the influence of the "kava-people", to whom, according to his opinion, the stone-using immigrants also belong ²⁾. In the same way, men's houses were built by Tagaro (Maervo), Ambat (Malekula), Kabat (Mewun), etc. Finally, the ogre story is almost identical with the many other ogre stories which have been recorded in connection with Qat (Banks Islands), Tagaro (Aoba), Ambat (Malekula), etc. The dropping of the coconut upon the house of the ogre is a detail which occurred in precisely the same way in the story of Qat and Qasavara in the Banks Islands.

Another myth relates the story of a man called Emakong. This man dived into a river to recover his ornaments which had fallen in the water. From there he brings fire, night, the crickets which chirp in the night, and the birds which announce the morning ³⁾. This myth is certainly reminiscent of the story of the creation of night by Qat (Banks Islands), Tagaro (Aoba and Pentecost), and probably also Mosigsig of Santa Cruz. In the same way the god Mogaona of Eddystone dived into the sea for

1) RASCHER 688 232 f, PARKINSON 630 703-705. 2) For the necessary criticism of this view, see the chapter regarding the "kava-people". 3) RASCHER 688 234 f, PARKINSON 630 692 f.

his lost ring, from where he brought back the coconut and the banana, one of the events which has led us to consider him as a stone-using immigrant ¹). Too little is known of Emakong, however, to permit of our identifying him with certainty with the other culture heroes of the stone-using immigrants.

From these facts it is evident that the influence of the stone-using immigrants on the Sulka must be taken for granted, although such influence does not seem to have been as strong as in many other regions.

Nakanai: There are very few records relating to the Nakanai, but according to most observers, racially, these people are similar to the Papuans ²). There is, however, no unanimity with regard to the language; some writers consider it to be Melanesian, others think it is Papuan ³). It certainly contains many Melanesian words, but this may be due to the intensive trading relations with the Melanesian coastal districts of the Gazelle Peninsula.

No stone-work or any use of sacred plants is recorded, as far as I know.

Mythological evidence. One myth relates the story of a man who came from the sky to the earth and brought fire to man. According to another myth, a certain man fell from the sky to the earth, where he married two women who, after his return to the sky, followed him there with their children ⁴). In view of the fact that similar myths are not recorded in the neighbouring regions with which the Nakanai have relations, the occurrence of this myth here is somewhat astonishing. The little knowledge we have of the Nakanai, does not permit us to trace with any precision the origin of these myths.

Bola: Our knowledge of the north coast of New Britain, west of Open Bay, is very scanty. We are rather better informed regarding the region of the Willaumez Peninsula, and particularly regarding the Bola. Very little is known of the racial characteristics of the Bola, but most observers emphasize the racial and cultural similarity of the Bola with the Papuans of New Guinea ⁵). The closest relations exist with the Vitu Islands. Voyages to these islands are related in numerous myths and in one it is said that the bread-fruit tree was introduced to the Bola from the Vitu Islands ⁶). Linguistically too the Bola are influenced by the Vitu Islands, and they have relations also with the Kombe and even with the Bariai in the west ⁷).

1) In a somewhat similar manner a man of Buin dived into the sea to bring back his lost axe. He broke into the abode of the dead under the sea, from where he brought back bananas. WHEELER 933 56 f. 2) RASCHER 687 210, PARKINSON 630 203, HEES 348 37. 3) BUSCHAN 117 134, PARKINSON 630 202 f, 782, SCHNEE 837 21, HEES 348 48 f, RASCHER 687 214, FRIEDERICI 271 217, 269 12. 4) HEES 348 63 f, 568-571. 5) See PARKINSON 630 203, 214 ff, 634 5, FINSCH 238 III 117, 385. 6) KROLL 443 413, 4222, 424, 377; for trading relations with the Vitu Islands see also: FINSCH 236 164. 7) KROLL 443 374 Note 1, 391, 407, FRIEDERICI 271 23.

In the sources of information nothing is recorded regarding stone-work. The ornamental shrubs gange, gale, ruqu, and also dracaenas (mare) are planted in the gardens. Dracaena leaves are used for the transmission of information as well as in magic; a myth also makes mention of its use in magic¹).

Mythological evidence. The myth of a man-eating ogre called Gugumeka is known here. It is also said that the people fled before him and emigrated. Only one woman remained behind; she bore twins who later killed the ogre. Then the people returned and the two brothers married. According to another version of this myth the man-eating being was an eagle, and the place to which the fleeing people went was Vitu Island²).

According to another myth, two men, Kura and Rabari, climbed a kavika tree (Malay apple) and ate the fruit. A kernel fell down and killed the ogress's pig. The two men descended, and when they discovered that the pig belonged to the ogress, they fled up a tree. On her own intestines the ogress tries to follow the men up the tree to eat them, but the two cut the intestines and the ogress falls to the ground and is killed. The men order an ant to creep through the body of the ogress to make sure that she is actually dead, whereupon they descend from the tree³). Besides the fact that this myth resembles the numerous ogre myths mentioned, this corroboration of the death is a particularly interesting detail, since it agrees with the verification of the ogre's death in Tanna, Aniwa, Futuna, and the Maui stories of Polynesia, though in the latter region it is Maui himself who creeps through the body of the ogre.

Another myth relates that formerly only a certain black substance was used as food. A woman called Runepai introduced taro, yams, bananas, and sugar-cane⁴), but nothing else is recorded about this woman.

A story of two brothers, one being wise and the other stupid, occurs here again and agrees in every detail with one of the Kabinana and To Koruvu stories of the Gazelle Peninsula⁵).

Another myth relates that all living beings fought against the big chief Koromagalu, who was finally killed, and from whose blood originated red dye. The dead Koromagalu knelt upon a big stone where the prints of his knees and feet can still be seen to-day⁶). We shall not give any definite interpretation of this myth, since nothing else is recorded about Koromagalu, but if by further investigation on the spot more mythological evidence can be obtained, I think the following points in this myth will appear particularly significant: that Koromagalu was a great chief, that they fought against him, that from his blood originated red dye, and that he left his footprints on the stone.

On the basis of such evidence it might appear somewhat daring to

1) KROLL 443 379, 395 Note 1, 416. 2) KROLL 443 374 f, 382. 3) KROLL 433 402 f. 4) KROLL 443 378. 5) Cf. KROLL 443 403, MEIER 546 73-79. 6) KROLL 443 424 f.

presume that the Bola have been influenced by the culture of the stone-using immigrants. This view is, however, borne out by the fact that there are quite clearly megaliths on Vitu Island, with which, it has been seen, the Bola have close connections. There is therefore nothing to justify the supposition that these relations are of only recent date.

French Islands: On these islands a Melanesian language is spoken¹⁾.

PARKINSON publishes a picture²⁾ of a very beautiful stone table, but makes no mention of it in his text. As stated in the introduction to this work, PARKINSON was completely unaware of the megalithic character of this stone table. Basing himself on PARKINSON's picture, SKINNER³⁾ estimates the horizontal slab to be about 3 feet above the ground, about 5 feet long and 8 inches thick. PARKINSON's unawareness of the problem is all the more regrettable since a thorough investigation of this island by an experienced anthropologist might have revealed very important information regarding the problem of megaliths.

It is further to be regretted that we have no records of myths.

Prehistoric objects. On Vitu Island, the natives brought PARKINSON a stone implement "dessen Zweck und Herkunft ich mir bisher nicht erklären konnte. Dasselbe besteht aus einem kugelförmigen Steinknauf von etwa 11 cm Durchmesser; dieser Knauf hat jedoch einen steinernen Stiel gehabt, der leider etwa 1 cm unterhalb des Knaufes abgebrochen ist; der Stiel ist etwa 3 cm im Durchmesser... Das Exemplar wurde mir von den Eingeborenen als etwas ihnen Unbekanntes gebracht"⁴⁾. From this description it is evident that the implement is a stone pestle.

Kombe: These people, the western neighbours of the Bola, speak a Melanesian language⁵⁾. They are the intermediaries in trade between the Bola in the east and the Bariai in the west⁶⁾. The latter extend their trading relations even farther to the west, as will be seen later.

The very limited sources of information regarding the Kombe record nothing about stone-work or the use of sacred plants. Neither are there, as far as I know, any accounts regarding prehistoric finds.

The following myth is therefore all the more important: Moro and Pango are two very important beings. Moro's son is called Akiukiu, Pango's son is Bego. These beings have human heads, but their bodies resemble that of a snake. The Kombe owe their origin to these two beings who are also the creators of death. They further introduced the present social organization, and all natural phenomena are due to them. Pango gave the people shell-money, red dye and obsidian; Moro gave them black dye, wooden

1) NEUHAUSS 603 I, 120, FRIEDERICI 271 224, SPEISER 797 133, 135: regarding the trading relations with the mainland of New Britain, see: PARKINSON 630 213, 227 f and the data previously quoted). 2) 630 Pl. 14 p. 208. 3) 783 235. 4) PARKINSON 634 5). 5) FRIEDERICI 271 27, 217, 269 37. 6) FRIEDERICI 271 27, 138 f.

bowls, arm rings of tridacna and tortoise-shell, cooking-pots, pigs, dogs, etc.¹⁾ I have no intention of discussing the problem of the introduction of the many articles which, in this myth, are attributed to the two culture heroes. The introduction of pots and pigs has at all events been found to be a characteristic feature of the many culture heroes of the stone-using immigrants.

It must be added that, apart from the prehistoric potsherds of Vuatom, no recent pottery is known in the whole of New Britain²⁾, and earthenware pots used in New Britain were said to have been imported from New Guinea. Does this myth refer only to this pot trade, or is it actually a record of the introduction of native pottery? It would be desirable to know more about this question. When the being Panku or Pangu of the Huon Gulf—whose name is apparently identical with that of Pango of the Kombe—is discussed, it will become even clearer still that relations do actually exist with New Guinea. On the other hand, it cannot be overlooked that the name Moro strongly resembles that of the culture hero Moroa of New Ireland who, together with Sigeragun was also credited with the introduction of pigs, amongst other things. The name Bego is absolutely identical with that of Bego of the Bougainville Straits, the stone-using immigrant who, among other things, introduced pots and pigs. It has further frequently been seen that the stone-using heroes had the body of a snake, or were partly a snake. That there do exist relations between these regions and New Ireland is further evident from the fact that the neighbouring Bariai, whose culture and language agree strongly with those of the Kombe, have a dual system similar to that of South New Ireland; and there too *Haliaetus leucogaster* and *Pandion leucocephalus* are bird "totems"³⁾.

Here again the lack of fuller information is regrettable; it would be highly desirable to know more definitely how far the stone-using immigrants, whose presence was so clearly apparent in the French Islands; have influenced also the coastal regions of the mainland of New Britain.

Bariai: FRIEDERICI⁴⁾ has seen in this people, whose language is Melanesian, representatives of his "Alfuren" migration. Trading relations exist not only with the neighbouring Kombe, Kilenge and Vitu Island, but through the intermediary of the Kilenge, Rook Island, Tami and Siassi they are even in contact with New Guinea⁵⁾. In these circumstances it is quite probable that the megalithic culture influenced the Baria as it did the eastern neighbours of these people.

The very meagre accounts again record nothing regarding stone-work.

1) NEUBAUSS 602 53 f. 2) For this see: BROWN 102 312; MEIER 550 101, PFEIL 656 37, 97, SCHELLONG 812 159, SCHURIG 841 25, etc. 3) FRIEDERICI 271 93 f, 187, 191, 196, 213. 4) FRIEDERICI 271 117 ff, 215, 269 1, 37. 5) FRIEDERICI 271 105, 119, 138 f, 191, 219, VOGEL 911 148, STEPHAN 842 4, GRAEBNER-STEPHAN 300 169 Note 8, FINSCH 236 164, 254, CHINNERY 146 23 f.

D'ENTRECASTEAUX who, in 1793, passed through the Dampier Straits, says ¹⁾ with regard to the west coast of New Britain but without definitely indicating the locality: "On the coast of New Britain we perceived... several huts, which in accordance with Papuan custom, were erected upon stones". This information is, however, not confirmed by any of the more modern observers.

Prehistoric objects. In the bed of the Gima River, near Sagsag village in the extreme west of New Britain, a stone mortar was found with four handles projecting horizontally from the sides ²⁾. This agrees completely with the stone mortar of Ambat of Malekula, which, it will be remembered, was also said to have had four handles. It cannot be determined whether this object can be traced back to the direct influence of the stone-using immigrants or has been brought here by trade with Rook Island and New Guinea where, as we shall see, similar stone mortars are also found.

Unfortunately, no myths of this region were recorded. Nevertheless to what extent there are reasons for presuming the influence of the stone-using immigrants will become clearer from the discussion on the mythological evidence of the neighbouring regions.

New Britain, South Coast: ELLIOT SMITH ³⁾ is of opinion that the artificial deformation of the head "became added to the repertoire of the fantastic collection of tricks of the "heliolithic" wanderers, and was adopted sporadically by numerous isolated groups of people along the great migration route".

As is well known, SPEISER ⁴⁾ has expressed the opinion that a group of immigrants from Nias touched the south coast of New Britain, continuing their migration direct to Malekula. This opinion was based upon the customs common in these regions of head deformation, the breeding of tusked boars, and the use of tusks as ornaments, sacrifice of pigs and the cult of the dead. We have seen that South Malekula is a centre of megalithic culture, and we must therefore first see whether traces of this megalithic culture are also to be found on the south coast of New Britain. Now, among the cultural elements existing in Malekula, but non-existent in Arue, SPEISER himself has mentioned ⁵⁾: megaliths, ancestor statues, skull masks, skull statues, and upright gongs, i.e. megaliths, and many of those cultural elements which, in the New Hebrides, are closely connected with them.

Records of the use of sacred plants are almost entirely lacking. All that we are told is that the dancers of the Kaumotmot society in Arue and Moeve Haven carry croton leaves in their hands, and in the centre of a garden plot in Moeve Haven "multicoloured bushes, grasses, etc." are

1) Quoted by PARKINSON 630 848. 2) SHERWIN and HADDON 781 160 ff, fig. A, B, p. 161. 3) 784 121. 4) 797 155, 179 f. 5) 797 155.

planted as garden magic. Of the western part of New Britain but with no definite indication as to the locality, BROWN mentions the planting of dracaenas, crotons and coleus, but he does not say for what purpose this was done¹⁾.

On Bungi Island east of South Cape, where the deformation of the head is also practised, CHINNERY²⁾ found a stone mortar.

In the very few myths recorded in Moeve Haven³⁾ we have not come across any of the themes which in the course of this study we have seen to be associated with the stone-using immigrants. Therefore, the presence of the very few elements enumerated is not necessarily due to the direct influence of the stone-using immigrants in this area. We know that the trading relations of South New Britain extend over Rook Island, Tami, Siassi, also even to New Guinea, and that in the western part of the island, they have brought about strong cultural resemblances with New Guinea; eastwards they extend a little to the east of Moeve Haven⁴⁾. The relations between West New Britain and New Guinea are so intensive that they have given rise to the opinion that immigration took place from one region to the other. Thus PARKINSON has maintained that there was expansion from New Britain to New Guinea⁵⁾, and POWELL and HAHN on the contrary hold that a migration took place from New Guinea to New Britain⁶⁾. These opinions are contradicted by FOY, who thinks that the cultural similarities can be explained by the existing trading relations "the existence of which in the western end, and also on the south coast as far as Moeve Haven, are beyond doubt"⁷⁾. It may well be possible that the few elements mentioned, which we associate with the stone-using immigrants, came to this island by trade. This is also the opinion of TODD with regard to the well known mokmok stones⁸⁾ which are to be found from Arue to A Nato (Gasmatta)⁹⁾. It is further worth mentioning that on Cape Gloucester, PARKINSON met people who had been driven from the Trobriand Islands; that on South Cape, people driven from the D'Entrecasteaux Group were found; and that on Arue Island light-skinned individuals were found who probably came from the islands off South-east New Guinea¹⁰⁾. It is likewise possible therefore that one or other of the elements enumerated were brought to the island by people who had drifted there, since all the regions from which these people came will later be seen to have been strongly influenced by the stone-using immigrants.

If SPEISER is right that a migration, in three successive stages, from Nias

1) CHINNERY 146 1, 21, VOGEL 911 153, TODD 895 196, BROWN 102 24. 2) 148 22, 3) see: TODD 894 89 f. 4) FINSCH 238 277, 479. 5) 634 6. 6) POWELL 680 194, 215, HAHN 601 (1896) 46 ff, (1897) 69, GRAEBNER-STEPHAN 300 167 f. 7) GRAEBNER-STEPHAN 300 167 quoted from PARKINSON-FOY. 8) TODD 895 93, 418 Note 25, but see also CHINNERY 146 1-25. 9) Regarding the mokmok stones see: MOYNE 588 81 f, 83, FRIEDERICI 272 269, VOGEL 911 151, 224, 239, PARKINSON 634 5, 630 54, TODD 894 198-201, etc. 10) PARKINSON 630 241 f.

to South New Britain and South Malekula, is responsible for the introduction of the custom of deforming the head¹), I think we are bound to conclude that this wave has nothing to do with the stone-using immigrants of Melanesia. The similarity of the various megalithic types, and most particularly the parallelism of the myths, does not permit of any doubt as to the relative uniformity of the megalithic culture in Melanesia; therefore, nothing could justify the supposition that the migration responsible for the introduction of the practice of deforming the head is any particular wave of the main migration of the stone-using immigrants. If one nevertheless considers the head-deforming people as megalithic in their culture, what explanation can be found for the complete absence of megaliths in South New Britain and the almost entire absence of the other elements generally associated with them? Moreover, it would be unjustifiable to attribute the rare occurrence of stone bowls and the use of sacred plants in South New Britain to this presumed particular megalithic wave, since we have shown these objects to be associated with the main body of the stone-using immigrants in Melanesia; and to contend that this hypothetical particular megalithic wave possessed partly the same culture as the main body of the megalithic people, and yet in some measure was different from it, would be pure fantasy. Finally, it would hardly be possible to explain the absence of megalithic stone-work in South New Britain by assuming that the contact with this presumed megalithic wave was only short and superficial; for the custom of deforming the head extends over a large area in South New Britain, penetrating in some districts so far inland that it almost reaches the northern coast²). On the other hand, it is significant that on the western part of the north coast of New Britain where the influence of the stone-using immigrants is shown to have existed, the deformation of the head does not occur. In these circumstances I incline to the opinion that the deformation of the head is due to some particular influence, which in South New Britain and in Malekula as well, has no connection whatever with the stone-using immigrants. This conclusion is also confirmed by the racial characteristics. The inhabitants of the south coast of New Britain whose language is a mixture of Melanesian and Papuan elements³) are racially Papuans, with woolly hair and brown to dark skin⁴). For all these

1) It is probable that this wave also brought the blow gun used by the Bariai, Kilenge, and in South New Britain. For the blow gun see the following sources of information: TODD 894 194, PARKINSON 630 225, 634 4, CHINNERY 146 19, 24 f, 152 208, FRIEDERICI 269 158, 271 105, 117 ff, SPEISER 799 463 f, BRAUNHOLTZ 91 95, HADDON in MOYNE 588 XXIII f. 2) For the distribution of the custom of the deformation of the head see: RECHE 709 264, 266, fig. 1 p. 264, CHINNERY 146 9, 54, 62, 148 22, 58, 66, PARKINSON 630 205, VOGEL 911 150, 158, 167, 207, 214, 232, 239, FINSCH 236 135, 238 I 121, FRIEDERICI 271 30 MOYNE 588 79, SPEISER 797 155, TODD 894 Pl. II, p. 202, etc. 3) FRIEDERICI 271 220, TODD 894 83, CHINNERY 146 83. 4) CHINNERY 146 18, FINSCH 236 134, 238 I 121 f.

reasons I do not think that the stone-using immigrants on their migrations touched the south coast of New Britain.

THE MASSIM DISTRICT

Trobriand Islands: The most natural procedure would be to continue our investigation with a study of Rook Island in the west, which, as we have pointed out has connections with New Britain. But in doing so we should have to omit for the moment, the eastern part of New Guinea and the Massim District where megalithic stone-work is abundant, and deal first with those regions in which the influence of the stone-using immigrants is less strongly felt. This would be contrary to the principle hitherto followed in this study,—a principle which we are entirely justified in applying to the area now under consideration. We shall therefore continue our investigation by the study of the Trobriand Islands.

In the Trobriand Islands there are two distinct racial types: one, quite Polynesian in feature, being long-faced, leptorhine or mesorhine, with lighter skin, and hair varying from wavy to straight; and the other Papuo-Melanesian in character, broad-faced, platyrhine, of darker skin and frizzy-haired. It is significant that dark skin and frizzy hair are considered to be ugly, and by numerous kinds of magic attempts are made to produce light skin ¹). The dolichocephalic people who prevail in the Massim District and beyond it are mixed with brachycephals in the China Strait, the D'Entrecasteaux Group, Murua, etc., a fact that leads to the conclusion "that the dolichocephals have been invaded by brachycephals" as HADDON puts it ²). This brachycephaly, together with the occurrence of wavy hair and long faces, has been attributed by SELIGMAN to a "Polynesian" admixture ³). It is, however, certain that this "Polynesian" element is nothing but the influence of the stone-using immigrants. To what extent this applies also to brachycephaly cannot be determined in the present study, since, owing to the meagre information available on this subject, no comparison comprising the whole of Melanesia can yet be satisfactorily undertaken. The language of the Trobriand Islands is Papuo-Melanesian ⁴). Trading relations, including the famous Kula expeditions, extend over a very wide area, viz. to the south, over the Amphlett Islands to the D'Entrecasteaux Islands Goodenough, Fergusson, Dobu and Normanby, and even to the mainland of New Guinea; to the east they extend over Kitava Island and the Marshall Bennet Islands to Murua and Nada. Wari Island is the southern limit of the Kula in the western branch of the Massim District, and in the eastern branch of the Massim District it extends to Misima,

1) MALINOWSKI 524 51 f, 525 147 f, 154, 159 f, 201, 204, 241, 251, 528 6, SELIGMAN 770 671, 773 269, 273, HADDON 325 271, FINSCH 236 206, 238 II 33. 2) 325 288, 290. 3) 773 273 f. 4) RAY 700 20, RESCHKE 713 145.

Sudest, and even to Rossel Island. It is apparent from this how strong is the cultural interdependence of the whole area ¹).

The most important of the megalithic stone-work are a number of stone-enclosures of which AUSTEN has given us an excellent description ²).

In Ilukwaiwaia, in the north of Kiriwina, two enclosures (A and B) were found, and two others (C and D) were found in Otuyam east of the former place. Of Ilukwaiwaia A, AUSTEN gives the following description: The southern wall extends for 61 feet, the northern for 58 feet, the western for 15 feet, and the eastern for 14 feet. The stones were embedded about 3 feet 6 inches below the present surface of the ground. At the eastern end of the south wall, a particularly fine slab of limestone is standing, the top of which would be about 7 feet above the level of the ground. Some of the walls were in a bad state of repair. Ilukwaiwaia B: This enclosure lies to the north of A, and was very much smaller in size. The measurements are as follows: southern wall 25 feet, northern wall 26 feet, western 11 feet, and the eastern 8 feet. Otuyam C: This enclosure has only one small stone in position, but the height of the walls must have been 7 to 8 feet. Williams found slabs to be as much as 16 inches thick. They were also of great weight, as the majority of them measured about 10 feet in length, i.e. 7 feet in height above surface level. The southern wall extends for 21 feet, the northern for 21 feet also, the western for 8, and the eastern for 8 feet also. Otuyam (D): This is the larger of the two enclosures. The southern wall extends for 38 feet, the northern for 40, the western for 13, and the eastern for 14 feet. Only one stone of the structure remains standing; it measures 6 feet, 8 inches in length, by 13 feet 4 inches in height, having an average thickness of 10 inches; it is embedded in the ground to a depth of 4 feet. From the position of the enclosures, Austen has concluded that they had some relation to time-reckoning, maintaining that their position corresponded to certain constellations of the stars ³). But this interpretation must be considered as purely imaginary until we have other data permitting of a comparative study of this problem. In Duwulaosi, not far from Ilukwaiwaia, only one walled enclosure was measurable: The southern wall extends 43 feet 5 inches, the northern 43 feet 5 inches, the western 11 feet 10 inches and the eastern 12 feet 5 inches. Most of the slabs of this structure had fallen inwards. In the village of Kasanai the slabs were very small, and the enclosure was also very much smaller than Otuyam C. In Okabululu, Kitava Island, there are two sites; one has but two rectangular slabs, one facing the other at a

1) MALINOWSKI 524 16, 29, 31, 79, 100, 165, 230 f, 363, 366 f, 478, 486, 488, 497 f, 525 135, 221 f, 245, 529 10, 530 98 f, 104 f, SELIGMAN 770 528-530, 534, 669, FINSCH, 236 207, 209, BROMILOW 100 20, MACGREGOR 520 72, etc. etc. 2) 30 32, 34-39, 41 f, fig. p. 33, 37 Pl. p. 52. It is regrettable that MALINOWSKI, the best expert on these islands, has recorded nothing of these stone-enclosures, and that his information regarding megalithic stone work is very scanty and sometimes even vague. 3) 30 43, 49.

distance of 18 feet. One slab 4 feet 11 inches high by 3 feet 9 inches broad is standing; the other, which has fallen, is 6 feet 6 inches long by 4 feet broad. It is not sure whether they formed an enclosure. The stones are

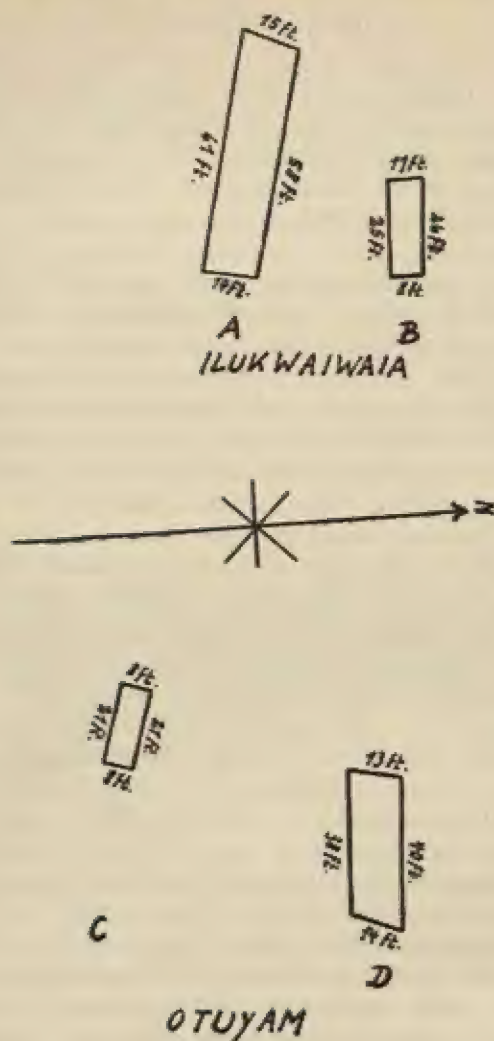


Fig. 19a. Megalithic structures, Trobriand Islands (After AUSTEN 30 33).

pretty well squared, and it is likely that they have been artificially trimmed. The other site would appear to conform to the oblong formations of Kiriwina, though on a very much reduced scale. One end was apparently closed by a single stone 9 feet 6 inches by 6 feet 6 inches, the opposite end by two stones, one of which remains standing. Of the northern wall—if there

ever was one—only two standing stones are left. The only trace of what may have been a southern wall is seen at one end in a mass of

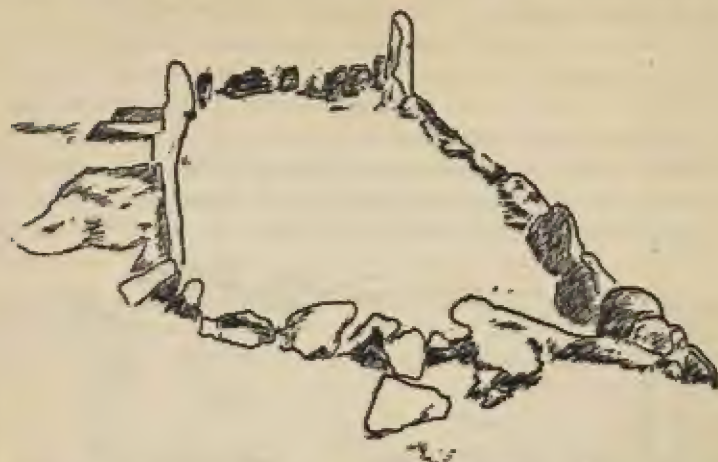


Fig. 19b. Ilukwaiwaia (A), looking eastward (After AUSTEN 30 52).

fragments. The Rev. WILLIAMS reports the existence close to Okabululu (Kitava Island) of a "volcanic coral" (?) structure. Huge pieces were raised

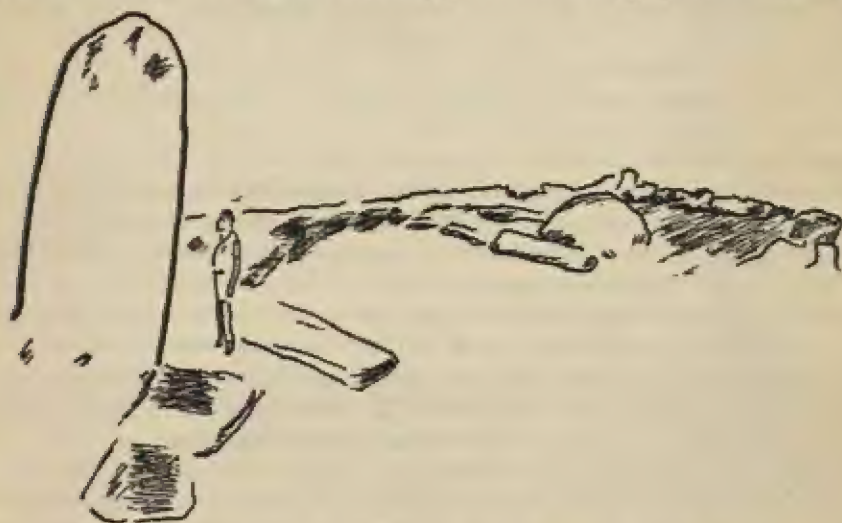


Fig. 19c. Otuyam (D), looking north-east (After AUSTEN 30 52).

in the formation of four walls. These stand from about 10 feet to 11 feet in height. But he did not see this structure himself. The best preserved of the sites of Kitava Island is found at Gumagea. The oblong outline of the enclosure is here clearly seen, although only four of the stones are

actually standing. Three remain where they have fallen, and the broken butts of at least seven others protrude more or less from the ground. These 14 stones together fill the whole length of the walls without any considerable gaps. The stones are all comparatively small, though the two which closed the ends measured respectively 8 feet 7 inches and 8 feet 9 inches across. The present-day native has little interest in the structures and the original purpose of these enclosures is lost.

Excavations inside the enclosures of Otuyam (C and D), and Kadalalai (Kitava Island) made by AUSTEN within a few feet of the surface brought to light fragments of human bones and fragments of prehistoric pottery.

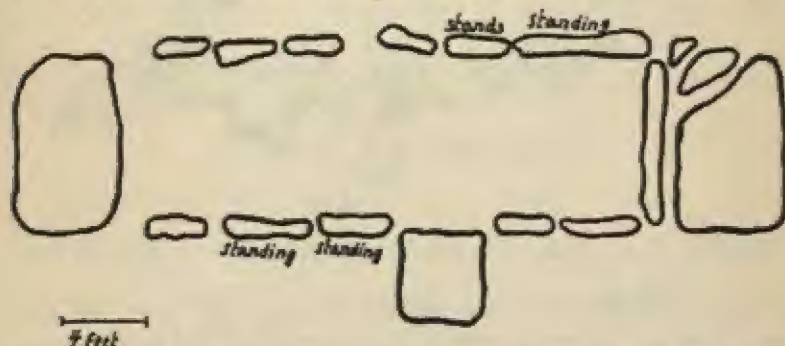


Fig. 19d. Rough sketch of Enclosure at Gumagea Kitava (By F. E. W. Williams, after AUSTEN 30 37).

From an examination of the bones of Otuyam (C) by an anatomist, it was likely for them "to have laid buried for 500 years but no more". The few bones found in the Otuyam enclosure (D), "were in a confused mass". The bones in the enclosure of Kadalalai (Kitava Island) were "scattered", mostly foot, arm, and hand bones. They were in an advanced state of disintegration. F. E. WILLIAMS found bones at Okabululu at a depth of 3 feet 6 inches "somewhat scattered, but sufficient to show that a burial had taken place at that point". He goes on to say that it seems likely that the enclosures were places of burial. At Duwulaosi, the natives told AUSTEN that years ago one could find bones all around the piled stones on the plot of land near the stone enclosures. The natives also said that at no time when gardening, had they found bones in any other part of their land except close to these old stone walls.

The fragments of pottery found together with the bones within the stone-enclosures "were so small, as to be useless for comparison to be made with other prehistoric pottery found in the Trobriand caves, but the type indicated that it belonged to the same period as the fragments found all over Kiriwina garden lands... They were undoubtedly of a different nature from the present-day village pottery obtained from the Amphlett Islands... As there was a similarity between the Trobriand fragments and a few of the cruder specimens from Collingwood Bay, I am inclined to believe that both sets

may have been made during the same cultural period", says AUSTEN. This opinion is of the utmost importance, and we shall refer to it later in our discussion on North-east New Guinea. All around the stone-structures of Ilukwaiwaia, Otuyam, and Duwulaosi, small pieces of pottery fragments were found of the same prehistoric make, and lying within a few inches of the surface.

Before discussing the problem of these fragments of prehistoric pottery, the following discovery made by AUSTEN must be mentioned. Exploring some limestone caves on N. E. Kiriwina and Vakuta Island, AUSTEN found a number of big pots containing human bones. As already mentioned, the Trobriand and Kitava pots of the present day all come from the Amphletts¹⁾, but these prehistoric sepulchral pots with human bones in them are of unknown origin. These pots, with their incised patterns quite unlike anything now known, are certainly not of Amphlett manufacture, but, like the modern Amphlett pots, they appear to have been built up by the coiling method²⁾. AUSTEN remarks that these prehistoric pots, as well as the prehistoric fragments of pottery within the stone-enclosures and elsewhere in the Trobriand Islands, "show a close affinity in their designs with certain pottery fragments collected by Seligman... at Collingwood Bay"³⁾, a remark which at the same time reveals the affinity of the potsherds with the entire pots containing human bones. It must further be pointed out that pot burial is unknown in the Trobriand Islands of to-day, and that as far back as modern natives can remember burial has always been by interment, followed later by the exhumation of at least some of the long bones and the skull which were made into lime spatulae and lime pots⁴⁾.

From these data it is not possible to decide whether, in those cases where bones and potsherds were found together within the stone-enclosures, we are faced with pot burial as in the case of the similar prehistoric sepulchral pots. It must, however, be pointed out that, since in the stone-enclosure of Otuyam (D), AUSTEN found together with the bones only a few fragments of pottery, he expresses the opinion that "the bones were probably not interred in a mortuary clay pot"⁵⁾. The scattered position of the bones encountered in all the finds corresponds very closely to the bones "lying in a jumble" found by THURNWALD in the dolmen grave of Buin, bones, which were likewise accompanied by prehistoric potsherds. We have already formulated the question whether this might not originally have been a burial in the sitting position, and the same question naturally arises again here. The connection with the dolmen graves of Ambrym and Kabat of

1) For this see: MALINOWSKI 528 40, HADDON 329 235, 237. 2) AUSTEN 30 42, 49-53, fig. 1-8, p. 53, MOYNE 588 74 f, BRAUNHOLTZ 91 95. 3) AUSTEN 30 46.
4) MALINOWSKI 525 6, 26, 106, 108-110, 528 166, 175, 293, 348, 531 355, 357, 524 242, 247, 320, AUSTEN 30 42, SELIGMAN 770 715-719, MONCKTON 576 88, etc. The practice of burial in large urns or jars has been attributed by ELLIOT SMITH to his "heliolithic" culture. E. SMITH 784 117. 5) 30 35.

Mewun is immediately apparent, the only difference being that here the burial, instead of being in the megalithic dolmen, took place in the megalithic stone-enclosure. If we are really in the presence of a burial in the sitting position, it is possible that two different methods of disposal of the dead may formerly have existed side by side, one exposing the bones in sepulchral pots in caves, and the other in the sitting position within the stone-enclosure accompanied by one or several pots. This would agree with the burial of the Kabat of Mewun who also were buried in the sitting position, and on whose head, knees, and buttocks pots were placed. However, since the skeletons of the stone-enclosures were not complete, it is more likely that the bones in the sepulchral pots were those which had originally been buried in the stone-enclosures, from which, after the decomposition of the body, they were exhumed.

The following other types of stone-work occur in the Trobriand Islands: In Duwulaosi, in the north of Kiriwina, a certain number of heaps of limestone slabs were found near the stone-enclosures of that place. Commenting on this AUSTEN remarks ¹⁾: "Some natives said that the piles had been made by their ancestors when clearing the ground for gardening. As this is a Kiriwina custom, there is no reason to disbelieve it". Also MALINOWSKI ²⁾ records that in the west and south of Kiriwina there are so many stones in the gardens that the people pile them up in big heaps called "turaga". In a magical spell intending to counteract the magic of estrangement it is said among other words: "From the stone heap I bring back, from the boundary wall of stone I bring back, I bring back your soul, o woman". MALINOWSKI, who records this spell ³⁾ says nothing else, however, regarding this stone heap. It is not clear from this whether the stone heap and the boundary wall of stone mentioned in the spell are synonymous. It may, however, be pointed out that none of the other sources of information records the existence of boundary walls of stone.

It is doubtful whether all the stone heaps were of profane character only, as AUSTEN suggests; for, with regard to the holes in the ground from which according to the belief of the people, the ancestors of the clans originally issued, SELIGMAN says ⁴⁾: "These holes ... are at present, either water-holes, or stone heaps, or small shallow cavities", and MALINOWSKI ⁵⁾ who says of Omarakana village that the village dancing ground was also used as a burial ground for the Tabalu, the most noble class, adds: "Here was found a tabooed heap of stone which no one must tread on or even approach".

A certain number of isolated standing limestone slabs one or two feet in height were found on Kuiao Island, southwest of Kaileuna Island. One standing isolated slab about 4 feet 3 inches high, by 2 feet 6 inches was found on Kitava Island. There was a hole as big as a child's fist right through this slab. Single slabs were also found on Vakuta Island ⁶⁾. In a

1) 30 36. 2) 528 21. 3) 525 261. 4) 770 678 quoted also by MALINOWSKI 531 390 and 525 342. 5) 528 431. 6) AUSTEN 30 37, 39.

little village of Vakuta Island, in the centre of the dancing ground, a stone indicated the place where the ancestors came forth out of the ground ¹⁾).

Sacred Plants. During the burning of the garden ground in the Trobriand Islands, the magician pronounces a spell over the leaves of a croton (*borogu*) which he then burns in the garden; in the magic made over a store house for the preservation of the fruits, a mixture of leaves is used containing also the leaves of the *casuarina* (*yayu*) and croton. When the so-called *kamkokola* structure is erected in the "magical corner" of the field, the magician puts into the ground near the structure *casuarina* leaves among others ²⁾). Croton, according to MALINOWSKI, is used in magic, "since the croton is associated with the sacred stones standing on the central place" ³⁾). Unfortunately, MALINOWSKI gives no further details either with regard to these sacred stones or regarding the character of the "association", but his remark, vague though it is, is a further proof of the association of the sacred plants with stone-work so frequently come across in the course of this study.

Mythological evidence. The legend of the culture hero Tudava is known in the whole of the Northern Massim District, viz. the Trobriand Islands, Marshall Bennets, Murua, etc. as well as in the D'Entrecasteaux Group and the Amphlett Islands. Everywhere Tudava is said to hail from Kiriwina, where he issued from the ground. He was the first to teach the people agriculture and garden magic. He was the first man who in Kiriwina issued from the ground; after him came the other people. He gave them his totem. When he came out of the earth, there existed no other country but Kiriwina. So he threw a big stone into the sea, whereupon Kitava Island emerged. Then he threw other stones into the sea and the islands Iwa, Kwayawata, and Digumenu appeared. Then he made Woodlark Island. All these islands made by Tudava were populated by people of Kiriwina who came over in canoes. Having finished his work in Kiriwina, Tudava sailed east to Kitava. In Kitava he planted big yams, *taytu* (a kind of small yams) and taro. Then he sailed to Iwa; there he planted big yams and *taytu*. Then he sailed to Digumenu, but the people drove him away; therefore he gave them only coconuts, and sailed on to Kwayawata, Gawa, Bovagise and Wamwara. In these Islands he planted taro, *taytu*, big yams, bananas and sago. When later he came to Nada Island where they wanted to kill him, he only gave them coconuts. Then he went to a foreign land beyond Nada and finally disappeared no one knows where ⁴⁾). But elsewhere ⁵⁾ MALINOWSKI adds: "The most recent version is that he most likely finished his career in the white man's country".

In this myth we again meet a typical culture hero who, like the many other culture heroes of the stone-using immigrants, is credited with the creation of islands and who, like them, introduced certain food plants,

1) MALINOWSKI 525 342, fig. 88. 2) MALINOWSKI 528 I 59, 124, 128-131, 422, II 88, 152. 3) 527 172, 528 I 235, II 154. 4) MALINOWSKI 528 68 f, 70-73. 5) 524 79.

including the coconut. The trend of this culture migration from the Trobriand Islands to the Nada Islands in the east is described in all its stages, and the hostility manifested by the aboriginal population vis-à-vis the immigrants is also recorded. Like the many other stone-using immigrants Tudava finally went away, nobody knows where. That, according to the more modern version he went to the country of the white man, might be an indication that he was light-skinned, although this is not expressly stated.

In the following story there are still further arguments supporting the view that Tudava was a stone-using immigrant: The mother of Tudava, Mitigis or Bulutukua, was the only woman of all the inhabitants of the village Laba'i in the northern part of Kiriwina who remained on the island; all the others fled in fear of an ogre, Dokonikan, who used to eat men and had in fact almost finished off the whole population of Kiriwina. Bulutukua, left behind by her brothers, lived alone in a grotto of Laba'i. One day she fell asleep in the grotto, and the water dripping from the stalactites fell on her genitals making her pregnant. Then she gave birth to a fish, a pig, a shrub having aromatic leaves and much appreciated by the natives as ornaments, and to other fish, birds, a dog and finally to Tudava. Tudava slays the ogre and thus makes it possible for the people to return¹). We have frequently come across this theme in connection with the stone-using immigrants. In some cases, the mother of the hero was the culture bringer herself, in others it was her ogre-killing son or sons. Here too, the woman was left behind by her brothers whom in some of the analogous stories we have seen to be the Qat brothers; but unfortunately the present story gives no detailed description of these "brothers". The fact that Tudava's mother gave birth to a pig, to a shrub with aromatic leaves, to a dog, etc. seems to point to the introduction of these things by the immigrants who are represented by Tudava and his mother; and it is the stone-using immigrants whom we have learned to consider as the introducers of the pig and the use of sacred plants, and the dog was also frequently mentioned as their companion.

The culture hero Gere'u known in the Trobriands, Murua, the D'Entrecasteaux Islands, etc. and his relationship with Tudava has been described in detail by MALINOWSKI²). Gere'u went first with Tudava to Murua Island, from there to Misima and finally to Normanby Islands. Like Tudava, he came out of the ground in Kiriwina, and like him, he belongs to the Lukuba clan. According to one myth he is the founder of the Kula trade.

Still further proof supporting the opinion that these immigrants are identical with our stone-using immigrants may be found in the following story of the peopling of the Trobriand Islands: "The world was originally colonized from Tuma, the other world³), men and women being sent to

1) MALINOWSKI 524 305, 525 125, 277, 531 411 f, 532 90 f, MURRAY 595 123. 2) 524 306 f, 528 69 f, 73. 3) Tuma is also the underworld of the Marshall Bennet Group, Murua, Tolcuna and Nada Island (SELIGMAN 770 660) thus affirming among other things the cultural connection of all these regions).

the upper world by Topileta who himself remained underground. There is a deep hole at Laba'i village in the north-west of Kiriwina, through which men first emerged from the lower world; first came the Malasi clan, accompanied by their bird totem and carrying their pig. The folk of the Lukuba clan came next bringing with them the fish-hawk, the pig and the dog; then came the Nukosisiga people bringing the green parrot and the pig, and then the men of the Lokulobuta clan bringing only their totem bird, the lory. Before the coming of men to the upper world there were no yams, and no stones upon which to support their cooking-pots, and it was Topileta who told them to bring these from the underworld, where men had already learned to build houses and make gardens¹). As can be seen, these immigrants are said to have brought the pig and the dog, and AUSTEN has rightly pointed out²) that "if the legend is genuine, it would seem that the people at Tuma had cooking-pots before landing on Kiriwina. If that were so they may have been pots brought with them on their migration." It might further be added that the mother of Inuvayla'u, whose association with the stone-using immigrants will presently be disclosed, is described by a myth to have made cooking pots for her son. If, accordingly, we are justified in considering these immigrants as the introducers of the prehistoric coiled pottery, this would be further confirmation that they are actually the stone-using immigrants who as we have repeatedly seen, introduced the prehistoric coiled pottery into Melanesia. This opinion is actually expressed by AUSTEN, who says³): "The Tabalu and probably other subclans were immigrants ... who brought with them a higher culture ... apparently megalithic culture." According to AUSTEN this particular position of the Tabalu, a subclan of the Malasi clan, is based upon the fact that to-day the Tabalu represent the most noble class. MALINOWSKI has, however, shown that originally the Lukuba clan was the highest clan, and only later lost this position to the Malasi⁴). It has further been pointed out by MALINOWSKI that, according to some legends, it was the Lukuba clan who issued first from underground⁵). It is therefore of particular interest that Tudava and Gere'u as well as the heroes Inuvayla'u and Tokosikuna whose association with the stone-using immigrants will be demonstrated, belong to the Lukuba clan; and Topileta also, the guardian of Tuma, belongs to the Lukuba clan⁶). It is further significant that it was the Lukuba clan which brought the fish-hawk.

According to the myth, Inuvayla'u lived in Kwabulo village. He was the head of the Lukuba clan. He had sexual intercourse with the wives of his younger brothers and his cousins. His penis was exceedingly long.

1) SELIGMAN 770 679, MALINOWSKI 524 440, 476, 525 125, 341-343, MURRAY 595 120-123. 2) 30 46. 3) 30 48. 4) MALINOWSKI 525 21, 341 ff, 368, 528 37, 64, 84, 321, 365, 367, 431. 5) 528 32". 6) MALINOWSKI 525 295, 528 321; according to another account, however, he is of the Malasi clan. MALINOWSKI 531 361 from SELIGMAN.

His brothers and cousins became very angry and plunged him into the water. When he came up again he was ashamed and, together with his mother Lidoya, he left the place. On the baku (the dancing ground) he took an axe with which he cut his penis. The glans fell on the baku at the front of his house and changed into stone. Another piece he cut off beyond the outer row of houses, and yet another between the village and the landing place of the canoes; all these pieces changed into stone. Then he went with his mother to Kayleula, and from there over the Amphlett Islands to the D'Entrecasteaux Group. Here he settled down. His mother made gardens and also cooking pots for him. Later he returned to Kiriwina. To this MALINOWSKI makes the following remark ¹⁾: "All the stones described in the story are still in existence to-day, although their similarity with their anatomical models has been effaced in course of time, whereas in size they must have enormously augmented ... The glans penis, a pointed, helmetlike piece of white coral stone is found on the village ground."

Unfortunately, MALINOWSKI has not given a more detailed description of these stones, but their phallic character, their position on the village ground, and the apparent similarity of their origin with that of the "Penis of the Ambat" of Malekula (see also the stone of Lihir "Penis of Zabndun") seem to justify the supposition that these stones were monoliths. But also from the other content of the myth it is apparent that Inuvayla'u is a stone-using immigrant: Thus Inuvayla'u's intercourse with the wives of his brothers and cousins is reminiscent of the story of adultery of the numerous groups of brothers whom we have shown to be representatives of the stone-using immigrants; and that the angry brothers and cousins plunge him into the water, is certainly in some way reminiscent of the attempt of the analogous brothers of the other stories to kill their brother by making him dive for the clam.

These themes, so characteristic of the stone-using immigrants, appear even more clearly in the following story: The mythological hero Tokosikuna of Digumenu was so ugly that he could not marry. Far north in the mythical land of Kokopawa they played a flute. Many men set out to get the flute; all fail, but when Tokosikuna goes, he succeeds in getting possession of the flute. He changes his appearance, becomes a beautiful man and marries all the women. The other men decide to get rid of him telling him to dive for a giant clam by putting his head into it. Tokosikuna dived, but with his hands he broke the clam shell open. Now, the others planned another form of revenge. They arranged a sharkfishing, advising Tokosikuna to catch the fish with his hands. But he simply strangled the sharks and put them into the canoe. After this he tears asunder a boar's mouth. Then they try to kill him by letting a heavy tree, felled for a canoe, fall on him, but he supports it with his arms. Then they persuade him to use pandanus only for the lashing of his canoe which he does. When

1) 525 283-290.

they sail, the other men in good, sea-worthy canoes, but he in an entirely unseaworthy one, his lashings snap, and the canoe sinks. He calls out to the other canoes, but they answer: "Now, sharks will eat you". Tokosikuna, however, swims safely to the Amphletts where he remains and does not return to Digumenu¹). The resemblance of the episode of the giant clam, of the killing of the man-eating fish and of the boar with the numerous stories of the other stone-using immigrants, is so clearly evident that we are forced to consider Tokosikuna as a stone-using immigrant. Also the attempt to kill him by a falling tree occurred frequently in the stories of the stone-using immigrants: Thus the brothers of Warohunuga of San Christoval and those of the "Delectable Lizard" of Saa ordered their brother to descend into the hole of the house post whereupon they let the post fall upon him to kill him; in the same way Barkulkul killed his adulterer brother in Pentecost, and also the brothers of Qat of the Banks Islands let Qat descend into a hole to kill him. How frequently the theme of adultery is associated with the heroes of the stone-using immigrants has already been pointed out; in the majority of cases this is the cause of the quarrel. The incident of the canoe lashings is strongly reminiscent of the canoe race of Qat and his brothers in which, however, it is the canoes of the brothers which sink; in the same way Lata of Santa Cruz deceived Sinota regarding the canoe lashings, and similarly Soi of the Bougainville Straits, who like Tokosikuna was despised by all, used the right lashings whereas the others used the wrong, so that their canoes sank. Soi's adventure with the sharks, which not only spare him but help him also whereas they eat the others, is similar to the story of Tokosikuna, who is also spared by the sharks.

Another myth relates the story of Kasabwaybwayreta, who lived in Tewara and who went with his children to kula a renowned spondylus necklace in Wawela. His son, although young and beautiful does not get the necklace, but the old father, changing himself by magic into a young and attractive man, obtains it. Being angry and to avenge themselves, the children let him go to fetch his own water on an island, and while he is dipping it up, they sail away, leaving him alone. He throws a stone at the canoe, but misses it, and the stone becomes an island. Then he calls to a number of stars to take him to his home, but after several stars had refused to do this, Orion takes him to his village. When immediately over his village he charmed a tree, so that it arose up into the sky. He sat on the tree, and the tree came down to the ground. So he returned to his village. A Dobuan informant introduced still another variation of this story, viz. that Kasabwaybwayreta married while in the sky and remained there long enough to beget several children after which he descended to the earth²). MALINOWSKI himself has pointed out the clear resemblance between this story and that of Tokosikuna. In both, the heroes start as old and ugly

1) MALINOWSKI 524 307-309. 2) MALINOWSKI 524 221, 322-325.

men, rejuvenating by their magical powers, both are superior in the Kula and both are punished by their companions. And he concludes: "The two stories are so similar that they must be regarded obviously as variants of the same myth, and not as independent traditions"¹). If, for the reasons mentioned above, we are justified in considering Tokosikuna as a stone-using immigrant, and if on the other hand, the stories of Tokosikuna and Kasabwaybwayreta are identical, it would follow that Kasabwaybwayreta too was probably a stone-using immigrant. This is further confirmed by the fact that in the story of Kasabwaybwayreta there are incidents which have been found to be associated with the stone-using immigrants: Thus Kasabwaybwayreta created an island, he bewitched a tree so that it rose up into the sky; like many of the heroes of the stone-using immigrants he lived in the sky, and, according to one version, he married a sky-woman as did Qat, Tagaro, Waipua and many of the other heroes of the stone-using immigrants.

In some of the other myths also the sky plays a certain part. A myth localised in Yalaka tells how the inhabitants of that village attempted to erect a high pillar reaching to heaven. Unfortunately, it fell down, and only one man remained above, who is now responsible for thunder and lightning²). Another story relates that a crab fell down from the sky, and brought black magic³).

A word must be said regarding the direction from which the stone-using immigrants came to Trobriand Island. We have seen that, according to one myth, the four clans came from Tuma Island, the country of the dead, in the north-west of Kiriwina. This is remarkable confirmation of the view that the country of the dead indicates the original home of a people, or at least a halting place on their migrations. The statement of the myth that the people came out of the ground in Laba'i is, geographically, in complete accordance with the origin of the people in Tuma; for Laba'i in the north-west of Kiriwina is directly opposite Tuma Island, and is therefore the first point likely to be touched by an immigrating people coming from Tuma Island. The importance of the north or the north-west follows moreover from the fact that Tudava was born in Laba'i, that Kokosikuna fetched the flute from the north, and that the wonderland, Kaytalugi, which is inhabited by women only, is situated in the far remote north⁴). On the other hand, MALINOWSKI has shown that migrations within the Trobriand Islands show a marked tendency to move from north to south. Thus, for instance, the Tabulu clan after its origin in Laba'i migrated to Omarakana, and from there even as far south as Vakuta Island, and this applies also to some other subclans; and in the Amphlett Islands also there are a certain number of subclans which have immigrated from the Trobriand Islands⁵). Since thus "all beliefs in ancestral spirits as well as most of the legends

1) MALINOWSKI 524 326. 2) MALINOWSKI 524 475. 3) MALINOWSKI 524 411.
4) MALINOWSKI 524 223 f, 525 125, 290-292. 5) MALINOWSKI 524 289.

about first things point towards the north-west, while cultural and sociological spread has a tendency to take place from north-west to south-east" ¹⁾, we can draw the conclusion, that the stone-using immigrants came to the Trobriand Islands from a north-western direction.

Marshall Bennet Islands: These islands which in race ²⁾, material culture, social organization and mythology agree almost completely with the Trobriand Islands ³⁾ with which they are also related by marriages ⁴⁾, have been shown to be halting places on the migrations of the stone-using immigrants Tudava and Gere'u.

There are, however, no records of stone-work on these islands.

Murua: On this island, where the myth of the culture hero Tudava and some other myths of the Trobriand Islands are also known ⁵⁾ and which we have seen to be a halting place on the migrations of Tudava and Gere'u, the racial characteristics are similar to those of the Trobriand Islands. Besides darker elements, there are also lighter individuals. The Papuan character seems, however, to be more strongly conserved than in the Trobriand Islands ⁶⁾. Here again the language is Papuo-Melanesian ⁷⁾ and in their social organization the people resemble the Trobriand Islands ⁸⁾. Trading relations, including the Kula trade, exist with the Trobriand Islands and Nada, and to the south with the Louisiade Islands, Tubetube, etc. ⁹⁾.

SELIGMAN and STRONG ¹⁰⁾ mention "two remarkable standing stones of which we could get no explanation".

Prehistoric objects. As in the Trobriand Islands, prehistoric sepulchral pots were found on cliffs and in cavities. LYONS ¹¹⁾ gives the following description of them: Each pot contained one or more skulls, besides other human bones. It was not until quite recently that the natives who have lived on or near Murua Island for generations became aware of the existence of the sepulchre. This, combined with the fact that, despite being well protected from the weather, some of the bones had crumbled to dust and some of the pots broke when lifted, proves the antiquity of the relics. Disposal of the dead in this manner has not been practised on Murua within the memory of any native now living ¹²⁾. As on Trobriand Island, no pottery is now made on Woodlark Island, but pots are purchased at Paniet, Dobu and Kiriwina. None of the sources of information records

1) MALINOWSKI 528 365, see also 119, 276, 419. 2) See: SELIGMAN 773 248, 273, 770 671, 776 53. 3) SELIGMAN 770 686 f, 672, 679, 701, 705, 721 f, 772 163. 4) SELIGMAN 770 709. 5) See: MALINOWSKI 524 79. 6) ROMILLY 739 128, HADDON 329 241 f. 7) MURRAY 596 33, RESCHKE 713 145, RAY 700 20. 8) LYONS 507 131, MALINOWSKI 524 78 f, 528 70, SELIGMAN 770 674, MURRAY 595 127. 9) SELIGMAN 770 534, MURRAY 595 113, ROMILLY 739 129, FINSCH 238 II 14, 33, MALINOWSKI 524 79, LYONS 511 165. 10) 778 349. 11) 511 164 f, see also: SELIGMAN 770 726 f, 731 f, SELIGMAN-STRONG 778 348. 12) Here too, as in the Trobriand Islands, earth burial and later exhumation of the bones is usual to-day, SELIGMAN 770 727-729.

anything regarding the method in which these prehistoric sepulchral pots are made, but it is almost certain that, like the prehistoric pots of Trobriand, they are also made by the coiling method.

At the bottom of an extinct river bed under 3 feet of superficial gravel two very fine stone pestles were found ¹⁾. Obsidian points were also found.

Nada Islands: We need not proceed to an investigation of these islands, first, because the existing accounts record nothing of interest for us, and secondly, because the inhabitants are identical in race and language with those of Murua, being in fact colonists from Murua Island ²⁾.

It has already been mentioned that Tudava, on his migration to the east, also came to Nada Island.

Continuing our investigation in the Louisiade Archipelago in the south and, proceeding from east to west, we begin with the study of Rossel Island.

Rossel Island: The inhabitants of this island have been considered by most writers as Papuo-Melanesian in race ³⁾. They are short, squat, dark-brown, or dull-black with frizzy hair ⁴⁾. Their language is Papuan, although it contains a few Melanesian words ⁵⁾. The social organization is almost identical with that of the Southern Massim District, the D'Entrecasteaux Islands, and the south-eastern end of New Guinea; the general, especially the material culture—the type of houses for instance—show strong resemblance to the south-eastern part of the Massim District ⁶⁾. These facts are all the more important since the megalithic monuments point also to the Massim District. Some of the people thought that they originally came from an island to the east ⁷⁾. Since "there are many features of Rossel culture that suggest an influence from the Solomons, and even from Polynesia", ARMSTRONG has in fact expressed the opinion that a culture coming from the east or the north may have reached Rossel Island ⁸⁾. It must, however, be emphasized that we have no data proving that such an immigration took place. Trading relations exist in any case only with Sudest, but by its participation in the Kula trade, Rossel Island has contact with the whole of the Massim District. Otherwise Rossel Island is very isolated ⁹⁾. The following discussion will show that Rossel Island has also

1) DE VIS 909, 7 12 f, Pl. I, CHINNERY 151 273, SELIGMAN and JOYCE 777 329 Note 2.
2) RAY 700 20, THOMSON 868 182, 322, ROMILLY 739 130, 132, MALINOWSKI 524 495, HADDON 329 243, SELIGMAN 770 673. 3) ARMSTRONG 25 4, THOMSON 867 532, 870 517; MACGREGOR, in one instance (712 (1892/93) 5-7 quote^d by ARMSTRONG 25 211) calls them the purest blooded Papuans, and elsewhere (712 (1890) 245) he says they are a mixture of the Motu and New Hebrides type. 4) ROCHAS 734 quoted by HADDON 329 228, THOMSON 868 17, ARMSTRONG 25 XV f, 236 f. 5) SCHMIDT 834a 156 f, ARMSTRONG 25 XXIII, 6, 712 (1921/22) 37, RAY 700 20, etc. 6) ARMSTRONG 712 (1921/22) 29, 25 15, 17, 77 f. 7) ARMSTRONG 25 226 from BELL 712 (1908/9) 104, 109. 8) 25 22 Note 1, 127. 9) ARMSTRONG 25 1, 11, 17, 28, 212 f, 223, 225, 228, MURRAY 595 131, 138.

been influenced by the stone-using immigrants, a fact which affords ample explanation for the resemblances with the Solomon Islands and Polynesia. There is not the slightest proof, however, that the stone-using immigrants came to Rossel Island from the Solomons or even Polynesia. The resemblance of the stone-work and of many other elements of the general culture with those of the Massim District, as well as the indications furnished by the myths, show clearly that the stone-using immigrants came to Rossel Island from the west.

On Rossel Island squatting places are frequently found in the villages made of flat stones laid down as seats with back supports in a circular form, know as "jagega" ¹⁾. In the case of coastal villages, these stone circles are generally built on the foreshore below high-water mark. On the death of a chief, a cannibalistic feast takes place ²⁾, and the victims are cut up and eaten at the stone circle. But these stone circles are not solely reserved for cannibalistic feasts; they are also associated with feasts connected with money operations, and are used as squatting places for those partaking in the feast. Similar stone circles (gahana) will later be encountered in Milne Bay and the D'Entrecasteaux Islands ³⁾.

Some of the villages show a terraced formation, with one or two houses on each terrace. The terraces are formed by cutting into the ground where soft, or by building them up with stones in other cases ⁴⁾.

One of the peculiarities of the island, according to BROWN, is the fact that "instead of the narrow bush tracks which we found on other islands, the natives on Rossel made wide-open roads through the bush, and kept them well cleared from all trees and undergrowth" ⁵⁾. This information is confirmed by ARMSTRONG who says ⁶⁾: "The villages have paths connecting the houses, any large stones being piled up artistically or used to surround small gardens of flowers ⁷⁾ or bananas within the village". This is the same type of broad stone-bordered avenues as those we have come across in Malekula, Vao, Uripiv, Saa, Ulawa, and the Gazelle Peninsula and which seemed also to occur on Vuatom Island, avenues which we have seen to be

1) According to 712 (1924/25) 14 they are called "jabbega". 2) This, in the opinion of ARMSTRONG, 25 106, 113 f, is the only form of cannibalism usual on Rossel Island. This opinion is in complete contradiction to that formerly held, namely, that the Rossel Islanders were the worst cannibals of the whole of Melanesia, an opinion which arose from the supposed massacre of the Chinese stranded on this island. 3) 712 (1890/91) 3 f, (1924/25) 14, (1931/32) 18, (1911/12) 19 f, MURRAY 595 139, THOMSON 870 516, CHINNERY 151 278, ARMSTRONG 25 XXIII f, 13, 113 f, 207, 229, Pl. XBI a, MACGREGOR 520 87, KRIEGER 441 277; KRIEGER who quotes his record apparently from MACGREGOR's book „British New Guinea“, but does not indicate the source—he mentions MACGREGOR's book only in the bibliography consulted by him—speaks of "Yule Island", instead of Yela Island as does MACGREGOR. But this is certainly an error; Yela is another name for Rossel Island. 4) ARMSTRONG 25 13. 5) BROWN 103 480. 6) 25 13. 7) The variety of these flowers is not indicated.

a characteristic feature of the culture of the stone-using immigrants. We shall revert later to the discussion of this problem.

The small gardens of flowers surrounded by stones are reminiscent of the stone circles of Malekula, the *pirupiru* of Arosi, Saa and Ulawa, and the other stone-circles mentioned; but a more detailed description of them would be desirable.

Sacred plants. There are very few accounts relating to sacred plants. At certain dances the dancers are decorated with croton leaves and carry croton branches; and they plant "flowers and bright shrubs in their gardens".¹⁾

Prehistoric objects. A planter found a stone pestle on Rossel Island, but he discarded what may have been the mortar belonging to it²⁾.

Mythological evidence. Before Rossel, or indeed any of the islands of the Louisiades, existed, there was only open sea and reef. The reef, which now surrounds Rossel, enclosed a large lagoon, the floor of which was Temewe, where there lived an immortal race whose chief was Wonajö. Wonajö made the land within the reef and then repaired to a new home, Ngwö on Mt. Rossel. After the creation of Rossel Island, Wonajö was visited by a snake god from Sudest for whom he made a mountain. Wonajö made the clouds and the stars, "particularly the morning star, which could be a sign to people to get up". The clouds that almost perpetually cover Rossel are the ashes of the first fire made by Wonajö, which he threw into the sky to conceal the island from the older island of Sudest. Wonajö also made the shell-money, and when a sago palm appeared of itself on Rossel Island, Wonajö, having discovered it, ordered two snake gods to cut the tree down, so that they could try it as food, which they did. In Temewe, Wonajö and his people seem to have been human in form, on Rossel the form of a snake by day and human form only at night. Most of the gods have this double character. Man was not created by Wonajö, but by a snake god Mbasí and a girl Könjini said to be of fair skin, whom Wonajö found on the island and whom he wooed in vain. Mbasí was a friend of Wonajö, and it was at the latter's request that Mbasí, said to be of dark colour, left Sudest and married Könjini on Rossel. With regard to the skin colour of the two, ARMSTRONG says: "That Könjini was fair and Mbasí dark-skinned is not indicated very definitely". When Wonajö visited Sudest, or sent over one of his snake friends, he paddled over in a wooden dish, "for Wonajö and his tribe being thorough bushmen had no knowledge of canoes"³⁾. But on the other hand, there is a myth that ascribes to Wonajö the light outrigger canoe used only in calm lagoon water and never sailed. Mbasí arrived in a sailing canoe bringing with him the sun

1) ARMSTRONG 25 90, 179, 182, 219, 223, MURRAY 712 (1907/08) 14-16, 595 134.

2) ARMSTRONG 25 81, Pl. XII. 3) In a certain song Wonajö says of himself: "I a bushman", and Wonajö's name must be avoided in a spell over a new fish net, otherwise no fish would be caught. Also in the story of Wonajö and Ye, Wonajö is represented as a "bushman". ARMSTRONG 25 60, 123, 164.

and the moon, the pig¹), the dog and the taro. (The yam was introduced in Rossel Island by a Rossel man, who visited Sudest, and who stole a yam from a Sudest woman)²). An egg was produced from the union of Mbasi and Kōnjini and from this egg came the first two human beings, and as a result of their incestuous union the present population came into being. Mbasi and Kōnjini retired to a beach near by, where they were converted into stones, Mbasi a piece of rock and Kōnjini a smaller stone; they remain at the present day as one of the most important yaba³). When the sun and moon went into the air, the sun found the moon too cold, and the moon found the sun too hot. Wonajō, therefore, arranged for the sun by day and the moon by night. Moreover, finding that the moon, the sun, and the sky, were too close to the earth, he raised the whole heavens to their present height⁴). The clan divisions were instituted by Wonajō and Mbasi, who gave each clan its specific totems. The myth tells of a fight which took place between the snake-gods and a tribe of fish in the interior of the island, in the age before man had appeared on the island. "Wonajō assembles the snakes, who sit around on stones and in trees, and he tells them that they must fight and kill the fish", whereupon he leads them against the fish. The five most important snake-gods that fight are Wonajō, Mbasi, Gadiu, Mbyung and Nongwa. Each of these snake-gods is accompanied in the fight by a host of similar snakes. Wonajō and all snakes of his kind are armed with the man-catcher, Mbasi and all of his kind with greenstone axes (of the Massim ceremonial kind apparently), Gadiu and all of his kind with bows and arrows, Mbyung and all of his kind with stones (probably thrown from slings), while Nongwa uses his fingers only. The snakes win the fight and the fish are exterminated⁵).

HADDON has explained this last part of the myth by saying⁶): "The fight between the snakes and the fish appears to be reminiscent of the conflict of invaders with the aboriginal population (the fish)". We must now ask: Are these invaders our stone-using immigrants? They are, as a matter

1) MURRAY has rightly drawn attention to the fact that in the Papuan language of this island, which contains only a few Melanesian words, the pig is called "mbwomma", "bwom", "boama", "bwo", "bwame", or "mbwimō", (ARMSTRONG 25 88, 150, 712 (1921/22) 32, THOMSON 868 308, 711 III 405) which is a Melanesian word. From this MURRAY has convincingly concluded that this "word was probably introduced with the animal". MURRAY 595 137, 712 (1911/12) 19 f, quoted also by ARMSTRONG 25 229. 2) ARMSTRONG 25 28. 3) Yaba are the numerous sacred places containing a stone, tree, or some other object; most, if not all of the yaba are attributed to Wonajō, and also otherwise connected with the snake gods; but since these stones are unworked, we can pass over the whole institution. For this see: ARMSTRONG 25 130-133, 136-139, 143-145, 148, 156-158, 160, 163-167, 26 4, 712 (1921/22) 27. 4) This story of the sky which was once very low and which was raised by somebody to its present height, occurs frequently in precisely the same manner in Indonesia, where PERRY has attributed it to his stone-using immigrants (651 167-169). In Melanesia, apart from Rossel Island, this story is known only in Fate (MACDONALD 517 a 731), Tikopia (243 16) and Motu (CHALMERS 127, 174, KRIEGER 441 310) as far as I know. 5) ARMSTRONG 25 28 f, 60 f, 127 132, 136 f, 157 f, 26 1-4, 27 161, 712 (1921/22) 26-28. 6) In ARMSTRONG 25 XXVII.

of fact, the creators of the land, and the introducers of food plants, pigs, dogs, shell-money, and other things, like the many other stone-using immigrants of Melanesia. We are not told expressly that Wonajō made the night, but this can probably be concluded from the fact that he made the sun to shine by day and the moon by night, and that he made the morning star to awaken the people; thus Qat (Banks Islands), Tagaro (Aoba and Pentecost), Emakong (Sulka), and probably also Mosigsig of Santa Cruz, created night and made the birds announce the morning. Wonajō's attempt to conceal Rossel Island from the older island of Sudest, equates him to many of the other stone-using immigrants who repeatedly left the places reached by them on their migrations, since they did not wish to see their old home any longer. The fact that these immigrating culture heroes of Rossel Island are snakes, or temporarily take the form of snakes, is additional support for the view that they are representatives of our stone-using immigrants; for in the same way the culture heroes Tangalua of Tanna, and Tangaroa of Futuna and Aniwa were represented as snakes; Moshikishiki of Futuna and Aniwa had a sea-serpent as his chosen abode; the megalithic culture heroes of San Christoval, Malaita and Florida were the figona serpents Hatuibwari and Walutahanga, and identical with these is the culture-bringing snake Bunosi of the Bougainville Straits. Furthermore, Bego and Akiukiu of the Bougainville Straits were represented as having a human head and the body of a snake, Orumurui also was a snake, and Marruni of New Ireland had a long snake-like tail; as Hatuibwari of San Christoval retired to a high mountain on Guadalcanar, so Wonajō retired to Mt. Rossel. In the deliberations which preceded the fight of the snake-people against the fish, and in which Wonajō summoned the snakes to fight the fish, the snakes "sit around on stones and in trees". This remark, though not very clear, at least reminds one in some way of the Rossel Island stone circles which, we have seen, were also the squatting places of the men. That these immigrants were actually a sea-faring people, is evident from the fact that Mbasi arrived in a sailing canoe. There is some inconsistency, however, in that Wonajō is described by the myth as a "bushman"; but this is apparently a contradiction occurring within the myth itself, since elsewhere Wonajō is a snake-god like Mbasi and like Mbasi, must have come from Sudest, the old home, which he no longer wished to see; he is even the chief of the snake invaders and leads them into battle against the aborigines (the fish); according to another myth, the light outrigger canoe is attributed to him. Since also by his creations he resembles the stone-using culture heroes, the version which describes him as a bushman can accordingly be only a syncretism. We shall further give a number of additional arguments proving that Wonajō, as well as the other snake-gods, were actually stone-using immigrants.

Judging from the weapons which the five snake-gods use in their fight against the fish, HADDON¹⁾ concluded that they "were not homogenous

1) In ARMSTRONG 25 XXVII.

people, since the bow and the arrow, and probably the man-catcher, belong to a "Papuan" stage of culture, but missile stones are "Melanesian". This judgement is certainly based upon the geographical distribution of these weapons. For the bow and arrow, although they are found as a toy or a medical instrument on Rossel Island and elsewhere in the east of New Guinea, are not used as a weapon amongst the Melanesians of the East of New Guinea, and the man-catcher has not been recorded east of East Cape¹). We have, however, already reached the conclusion that the bow and arrow must be considered the characteristic weapons of the stone-using immigrants; and further, Sina Kwao and his mother's brother of Malaita were seen to use coir nooses as man-catchers. From this it is clearly evident that the mere geographical distribution of a certain object is by no means sufficient for assuming that it is an adjunct of any particular stage of culture. This shows clearly the great importance of myths in the study of the history of cultures. The bow and arrow may well be a "Papuan" weapon, but this does not exclude that it was also used by the people belonging to a more recent culture. In these circumstances, I consider the fact that the snake invaders possessed the bow and the man-catcher as further proof that they were stone-using immigrants. It is particularly significant also, in my view, that they used the ceremonial greenstone axes of the Massim kind as weapons, a point to which we shall refer again later.

Another difficulty lies in the fact that Mbasi is said to be dark-skinned; but, on the other hand, it is highly significant that he marries a light-skinned woman who, according to HADDON²) is "presumably of the snake race". If HADDON is right, it would be incompatible that Mbasi, who is also of the snake race, should be dark-skinned. In any case the fact mentioned by ARMSTRONG "that Kōnjini was fair and Mbasi dark-skinned is not indicated very definitely", must be borne in mind and it might be asked whether this ambiguity has not been brought about by a syncretism similar to that by which an attempt was made to convert the sea-faring snake-immigrant Wonajō into a "bushman".

For the following reasons it is certain that these snake-like stone-using immigrants came to Rossel Island from Sudest: Wonajō made clouds to conceal Rossel Island from the older island Sudest, an incident which, as has already been pointed out, is strongly reminiscent of the figona serpent Hatuibwari of San Christoval, which wandered from one place to another so that it might not see its former homes; for the same reason "Red Head" of Malaita went into the interior of the island, since he was unwilling to see Florida and Isabel, and the same reason was given for the migrations of the stone-builders Lulura of New Ireland. Other facts confirm the view that the stone-using immigrants came from Sudest: thus the snake-god who visited Wonajō and for whom Wonajō made a mountain, came from

1) ARMSTRONG 25 132. 2) In ARMSTRONG 25 XXVII.

Sudest; Mbasi came from Sudest; and yams were stolen from Sudest by a Rossel Island man.

That Wonajō is a stone-using immigrant becomes still more clearly evident from the numerous stories in which he figures as the antagonist of the god Ye, which account corresponds to the stories of the two antagonists so highly characteristic of the stone-using immigrants. The god Ye in his animal form is a huge fish-hawk. To Ye is attributed the origin of sorcery. Ye had intercourse with his sister. A dog nearby laughed at this incestuous relationship, whereupon Ye killed his sister. The sister of Ye seems to have been the first for whom a cannibal mortuary feast was held. Ye eats the man, sacrificed on account of her death. Ye, or rather the ten jina (sister's son) of Ye, invited Wonajō to come and catch clams. Ye's jina open the clams with stones, without letting Wonajō see; but when Wonajō's jina ask how to open their clams, Ye says; "Use your hands", and the jina of Wonajō hurt themselves badly. Wonajō then invites Ye to a feast at Mt. Ngwō. In the night, when Ye and his jina are asleep, Wonajō, casts a spell and makes Ngwō rise to the heavens from where Ye and his jina descend to earth by a rope. Ye then invites Wonajō to sail over to Loa in Ye's canoe, but when Wonajō and his jina are asleep, the others leave in the only canoe. Wonajō, however, merely causes two trees, one on Loa and one on Rossel, to bend over and meet whereupon he ties them together, so that he and his jina are able to walk over safely to Rossel Island¹). That the god Ye in his animal form is a huge fish-hawk is in itself a very significant fact since, as we have seen, the fish-hawk was associated with Soi and To Kabinana of the Bismarck Archipelago; it was brought by the Lukuba clan of the Trobriand Islands; it was also the symbol of Moroa; and the sea-hawk was likewise the symbol of Sigeragun of New Ireland; in Arosi we have come across the close connection of the Bina-hawk stone with the Araha, and the frigate-hawk, also carved in stone, was the sacred bird of the Araha; in the Three Sisters Islands the frigate-hawk was represented in the petroglyphs of the wells which we have shown to be part of the culture of the stone-using immigrants. These are only a few examples, although a great deal more could be said on this subject. It has already been mentioned that PERRY considered incestuous union as a custom characteristic of the stone-using immigrants²), but this problem will not be discussed here. Here again we come across the theme of the clam shell though in a slightly modified form³). The causing of Mt. Ngwō to rise is but a somewhat modified form of the lengthening of a tree, a theme so often associated with the stone-using immigrants; and the bending-over of the tree is also the usual way of descending from this heightened tree.

ARMSTRONG 25 132-134. 2) 651 96 ff. 3) According to another myth, the giant clam is said to be the friend of Kangō, the chief of one of the underworlds. ARMSTRONG 25 120, 26 8 f.

The origin of the coconut is related in the following way: Before the time of coconuts, a dugong, called Chima, one day sends his jina (sister's son) to catch fish. The boy spears a sting-ray, but the latter, shaking itself free, kills and devours him, all but the head. Chima finds the head and puts it in a house and coconuts sprout from it. He plants them, and when the fruit appears, distributes them among his friends¹). It is clearly obvious that this story agrees completely with those of To Natnangur of Vuatom and the son of To Kabinana of the Gazelle Peninsula, and that it is similar to the numerous other analogous myths regarding this subject whose association with the stone-using immigrants has been proved.

To sum up; the same megalithic stone-work as on Rossel Island is found also further in the west; the general culture shows many points of contact with the Massim District; trading relations exist with Sudest and, what is most important, the myths also point to Sudest as the immediate place from which the stone-using immigrants came to Rossel Island. All these facts lead to the conclusion that Sudest was an important station in the migration of the stone-using immigrants, and, accordingly, that their immigration to Rossel Island took place from the west.

Sudest: It has been pointed out that Sudest is an important station of the Massim culture on its advance from west to east. This intermediate position has also been pointed out by ARMSTRONG who says that "Sudest is thoroughly Massim in culture with a few features which remind one of Rossel Island"²); this is borne out by the fact that the language, which contains some Papuan elements shows a stronger Melanesian character than the language of Rossel Island³).

It is greatly to be regretted that our knowledge regarding Sudest is so scanty; the few sources of information say nothing about stone-work. The following information given by ARMSTRONG⁴) is therefore all the more important: "Mbasi, who migrated to Rossel Island, is well known in Sudest legend, his brother "Tamudulele" originating the Sudest people and others further west, and in particular originating the various food-stuffs even as far west as the D'Entrecasteaux Islands. On Panaiati, his relationship to "Taufo", the pig-hero of Suau-Daui is known. West of Panaiati he has become the spirit of food-stuffs such as yam and taro, demanding sexual connection with women ... for the sake of their gardens ... On Sabari in the Calvados Chain food offerings to stone relics of Tamudulele are of importance. We find there the first pig, introduced by him, in coral, also his genitals and those of his wife, his tomahawk, and the steering paddle of his saling canoe". This myth reveals the complete identity between Mbasi and Tamudulele in their capacity as culture heroes; the creation of the people, of food-stuffs, the introduction of the pig, which characteristically

1) ARMSTRONG 25 141. 2) In 712 (1921/22) 29 f. 3) RAY 700 20, ARMSTRONG 712 (1921/22) 37, 25 5. 4) 712 (1921/22) 29 f, 26 Note 2.

changed later into stone, are attributes of both these heroes, and are the typical incidents associated again and again with the stone-using culture heroes of Melanesia. Like Mbasi, Tamudulele also has a sailing canoe, and the mention of his tomahawk is of particular interest, since it leads us to suppose that this might also have been a ceremonial axe of the Massim type. But no details are given about it. In describing them as brothers the myth expresses the fact that both these culture heroes are actually related. Unfortunately, nothing more detailed is recorded regarding the "stone relics" of Tamudulele to which, on Sabari, food is offered. From ARMSTRONG's summing up it appears clearly that we are in the presence of a culture which has spread far over the whole of the Massim District and the eastern part of New Guinea. When all the evidence of this megalithic culture in the whole of this great area has been quoted in detail, the strength in which the stone-using immigrants spread over this area will become apparent.

Misima Island: The inhabitants of this island show the same intermixture as the people of the preceding islands. One of the two existing types is markedly Papuan, whereas THOMSON describes the other type as "betraying strong Malay characteristics, such as the straight hair, and prominent features" ¹⁾. The language is Papuo-Melanesian ²⁾. It has been seen that Gere'u, the originator of the Kula, and companion of the stone-using culture hero Tudava, on his migration from the Trobriand Islands also came to Misima Island.

The only reference to stone-work which we have is by THOMSON, who says ³⁾: "The dead are buried, but the head is sometimes afterwards exhumed and placed in a stone cairn".

Prehistoric objects. An obsidian spear head 135 mm long was found at a depth 4 metres below the surface by a miner whilst sinking a shaft on Misima. It is triangular in form, one end worked to form a broad, short tang⁴⁾.

Tubetube: The inhabitants of Tubetube originally came to their present home from Normanby Island to which island also their dead return ⁵⁾. Their racial resemblance with Normanby Island and Milne Bay also confirms this ⁶⁾. Trading relations cover an extensive area, limited by

1) THOMSON 867 517, HADDON 329 226, 261, from THOMSON. 2) RAY 700 20, HADDON 329 226. 3) 867 518. 4) SELIGMAN and JOYCE 777 328; quoted also by CHINNERY 151 276; in the same shaft, but some 5 metres lower, i.e. some 9 metres below the surface, a small stone adze-blade was found, SELIGMAN and JOYCE 777 328 f, fig. 2, but as far as I can see this adze-blade has nothing particularly noteworthy and is of the usual type which HEINE-GELBERN calls "Walzenbeil". 5) SELIGMAN 770 428 f, 464, 657, 773 271, SELIGMAN-STRONG 778 239. 6) SELIGMAN 773 271, ARMSTRONG 25 XV f.

the following extreme points: Murua, Trobriand, Normanby, Dobu, South Cape, Milne Bay, and East Cape ¹).

In these circumstances it is remarkable that stone circles which occur in many of the regions mentioned, are not present on this island. SELIGMAN is quite definite on this point, saying ²): "It was said that baru (stone circle, Rogea) were not made in Tubetube even in the old days, and there was so general a consensus of opinions as to the accuracy of this statement that it must, I think, be assumed to be correct".

He mentions only a man's grave which was "a heap of stones, on which there was some vegetation" ³).

Engineer group: LYONS gives the following description of a wooden altar of the Engineer Group ⁴): In Koiaria village, the altar (shown in his accompanying photographs) stood until recently. It is said to have been made by a man who appears to have been a chieftain. The natives of the Engineer Group were cannibals. From their account it seems that human beings taken captive in war were brought to Koiaria village where they were killed. The bodies were placed on the altar, and then cut up into pieces. The table post or support is called tai-ea-kai, which means "men I eat", and the top or plate is called gaeba. Though made out of a hard durable wood, both parts of the altar are much in decay, indicating that they are very old. The table post stood upright, 8 feet out of the ground, surmounted by the head of a man facing the sea and the east. The altar represents a trinity of the complete figures in relief of a man and a woman, and the head of a man. The greatest circumference of the table post is 68½ inches. The table-top measures 68½ inches long by 57 inches broad. Neither natives nor old European residents of the Engineer Group and other eastern districts of Papua know or have heard of another altar such as is here described.—Whether this wooden altar has anything to do with the stone-work which in some regions, as we have seen, was also connected with cannibalism, or whether it goes back to a model of stone, I am unable to say.

Rogea, Samarai and Sariba: The inhabitants of these three islands can be treated together since in race, culture and language they are practically one people ⁵). Their language is Melanesian with but few Papuan elements ⁶). They have frizzy hair, but the skin is light and the nose narrow, thus showing, what BURGER calls "Polynesian influence" ⁷). Trading relations exist particularly with Teste Island, Milne Bay and Suau ⁸).

1) MALINOWSKI 524 496, SELIGMAN 770 35, 492, 513 f., 526, 584, 588, THOMSON 868 41, HADDON 329 222, etc. 2) 770 463 f. 3) 770 14. 4) 508 31 f., fig. 1, 2, 3. 5) HADDON 329 221. 6) RAY 700 18, RESCHKE 713 144 f. 7) BURGER 114 204, HADDON 329 222. 8) FINSCH 236 392, ABEL 13 66, HADDON 329 221, HIGGINSON in 712 (1920/21) 53.

As has already been mentioned, stone circles called "baru" or "balu" are found on Rogeia Island, and seem to be connected with cannibalistic practices. Women were not permitted to approach these stone circles. 1).

On Rogeia, Sariba and Samarai, MacGREGOR found charnel houses, of which he gives the following description 2): "This receptacle consists of a rough stone wall 4 feet or 5 feet high, about 12 feet long and about half as broad covered in by a neatly made saddle-shaped roof. It appears that the dead body is interred for a few months elsewhere, and the bones are then dug up and put into this house which then, but only on such occasions, receives a new roof. In some of these charnel houses there are scores, if not hundreds, of leg and arm bones, but it is not quite clear that the skulls are deposited there, as those seen are few in proportion to other bones". It is certain that the nearest approach to these "charnel houses" are the stone-enclosures of the Trobriand Islands within which also certain bones of the dead were buried.

We shall now study the islands of the D'Entrecasteaux Group.

THE D'ENTRECASTEAUX ISLANDS

Goodenough Island: The inhabitants of this island have skin of a chocolate colour, which, however, is sometimes considerably lighter in tone and even in some cases reddish. The hair is frizzy, curly, in other cases almost straight, and also with some individuals, reddish 3). The language is related to that of Kiriwina and Dobu with which regions there exist other close relations too 4). Thus, for instance, ghosts and certain spirits are called "balaumo" 5) which corresponds to the "baloma" of the Trobriand Islands. According to one opinion the spirits of the dead go to North-west Normanby Island, but according to another, to Tuma Island 6) from where the stone-using immigrants came to the Trobriand Islands, and which we know to be the afterworld of the whole Northern Massim District including the Trobriand Islands. Trading relations exist not only with the neighbouring Fergusson Island, but particularly with the Trobriand Islands, Dobu and the mainland of New Guinea. According to a tradition, a certain kind of banana is said to have been introduced from the Trobriand Islands. Relations with Dobu are partly warlike in nature, since the Dobu people on their far reaching war expeditions also come to Goodenough Island 7).

Here again, in the centre of the village, stone circles called "tuwaka" occur. The tuwaka is a low circular platform about three feet in height and usually about ten feet in diameter built of smooth stones. A few flat

1) SELIGMAN 770 463, 465, LINDT 498 78; for stone circles in "Southern Massim" see MALINOWSKI 524 35, 37. 2) 712 (1888/89) 27 quoted by AUSTEN 30 42.
3) JENNESS and BALLANTYNE 416 48-50, ARMSTRONG 25 XV. 4) JENNESS and BALLANTYNE 416 56. 5) JENNESS and BALLANTYNE 416 105, 131, 155, 417 29. 6) JENNESS and BALLANTYNE 416 34, 145, 417 (1927) 323, (1928) 341, 292. 7) JENNESS and BALLANTYNE 416 29, 34-37, 49, 54, 86, etc. 417 (1928) 44, 387, 396.

slabs are set up on edge round the circumference, to give the natives some rest for their backs where they can sit and gossip ¹⁾. As on Rossel Island some of these stone circles are connected with cannibalism. In the case of a cannibalistic feast the victim was sometimes dismembered and disembowelled on the stone platform. Next day the stone platform was washed with sea-water. JENNESS and BALLANTYNE mention the burial of a woman during which the following incident happened: When the body was carried to the grave a halt was made beside the stone platform, the body was laid upon the stones and all the people gathered round and wept; then it was carried to its grave ²⁾. On the stone circle at Ubulea in Kabuna in Mud Bay, there still grows an ancient croton tree (keakea) which is believed to possess magic properties. The Wifala people (near Kabuna) requested a shoot from it and planted it near their own platform, together with another magic shrub called walafai. The new croton that sprang up had such wondrous power that a woman who merely touched it immediately became demented. The natives therefore have always regarded it as a precious amulet, and used to fix it in their armlets and against their knees when going forth to fight ³⁾.

"Sometimes over the grave of a man of wealth and influence two stones are set up, one at the foot and the other at the head, to keep his memory green amongst his people. No marks are placed on these stones, no alteration made in their shape" ⁴⁾. From this description it is possible to consider these stones as monolith-like in character. In the north of Goodenough Island, at the side of the track that leads to the Waibula settlements, there are six large stones. JENNESS and BALLANTYNE say that they were set there to warn passers-by of the fate of six Mitaita men (a neighbouring village) who were killed and eaten ⁵⁾. A detailed description of these stones or the track is not given.

In the hill villages of the north-east coast usually placed upon commanding points or spurs, round stone towers were built covering all approaches. MONCKTON, who records this ⁶⁾ gives the following reason for their construction: "A man when using a sling on the level could only use it at such a length as to reach, when whirled, from the bent arm to the ground. If standing on a flat-sided tower, however, the limit of the length of sling he could use was only decided by his strength and the weight of the missile he meant to hurl; and the greater the length of the sling and weight of projectile, the greater the effective range". Since, as far as I know, the other sources of information do not mention these towers, I give this information and its explanation for what they are worth.

1) JENNESS and BALLANTYNE 416 45 f, 140, 417 39 f, SELIGMAN 770 466 Note 1, THOMSON 868 31; 712 (1924/25) 14, (1931/32) 18. 2) JENNESS and BALLANTYNE 416 88 f, 117. 3) JENNESS and BALLANTYNE 416 85. 4) JENNESS and BALLANTYNE 416 62.

5) JENNESS and BALLANTYNE 416 82 f. 6) 576 38 f.

With regard to houses, THOMSON records 1): "In some of the coastal villages the houses are built on coral foundations". No mention of coral foundations is made in any of the other records—some of which are very detailed—of the construction of the houses 2), so that the accuracy of THOMSON's information is perhaps dubious 3).

Sacred Plants. Unfortunately, only very little information is available regarding sacred plants. As already seen, croton (keakea) has magic properties, and is closely associated with the megalithic stone-work. JENNESS and BALLANTYNE emphasize that the croton is considered as a sacred tree, and that everybody who touches it faints. In diving for shells, orange-coloured croton is put into the armlets, by which device the orange-coloured shells are believed to be more easily caught 4). It is, however, not clear from this whether it is the imitative character of the colours or the magical value of the croton which is decisive. Graves of people of consequence are covered with ornamental shrubs 5), but more detailed information is not available.

Prehistoric objects. I am not aware that any prehistoric objects have been unearthed on Goodenough Island. SELIGMAN and JOYCE 6) mention a flake of obsidian "obtained on Goodenough Island, where it was brought for trade". This had recently been lashed to the head of a spear. Its length was 113 mm. Although fragments of obsidian have been found at numerous places on the south-eastern part of British New Guinea and its archipelagoes, there is no tradition that it was ever worked to form implements. Therefore the flake found on Goodenough Island is considered by SELIGMAN and JOYCE to be prehistoric 7).

Petroglyphs have also been discovered on Goodenough Island 8).

Mythological evidence. As in the Trobriand Islands, mankind is said to have originally dwelt within the earth. Under the leadership of the man called Konawabu they emerged and went to Dobu, the Amphlett Islands and Kiriwina, "they went everywhere, everywhere" 9). But as far as I can see, this myth does not record anything which would entitle us to identify these immigrants with the stone-using people.

With regard to the introduction of taro, it is related that a woman chanced to see some taro lying on the ground. She tried it, found it good, and from that time it was planted 10). But this woman has otherwise no typical characteristics. Her daughter's husband is called "He who causes night", a name which certainly reminds one of the creation of night by some

1) 868 31. 2) For this subject see JENNESS and BALLANTYNE 416 46 f, 117 f, 182 f, Pl. p. 150, 417 (1927) 35, 37, 40, 42, 45, (1928) 380 f, 387, 395, 399, FINSCH 236 240, KRIEGER 441 270. 3) The stone walls erected in the terraced gardens on this island and in the other parts of Melanesia will be discussed later. 4) JENNESS and BALLANTYNE 416 45, 136. 5) THOMSON 868 31, MONCKTON 578 89. 6) 777 328, Pl. VIII, fig. 6, 7. 7) 777 326 f. 8) JENNESS and BALLANTYNE 416 199. 9) JENNESS and BALLANTYNE 416 67, 417 161-164. 10) JENNESS and BALLANTYNE 417 (1927) 233-238.

of the stone-using culture heroes. But according to the story, this man belongs to those people who did not know the taro, and nothing else is recorded of him in the myth. In another myth, the introduction of taro and of agriculture in general, is attributed to a man bearing the name "Pierced Neck"¹). But this myth contains hardly any of the features we have so far found to be associated with the stone-using immigrants. It is therefore significant perhaps that his daughter, with whom he lived, bears the name "The woman who creates night".

The discovery of the coconut is related in a manner quite uncharacteristic and totally different from the other numerous myths on this subject quoted up to the present. In two versions a solitary coconut is mentioned which, in one case is discovered by a man and, in the other, by a woman²).

The following myth again contains a familiar theme which has frequently been found to be associated with the megalithic immigrants. An osprey began to devour all the people, so that the remaining people fled and went to Ubuvala. With them went Kwabea and his wife Adifolova, leaving their children Kewala and Wiwia, who were still very young, with their grandfather Yolele. Yolele, then, with his grandchildren entered the ground and stayed there. After the children had grown up the grandfather made them weapons. They carved out a canoe, took their dog on board and went away to the osprey which they killed. When they saw the osprey stretched out motionless, to see whether it was really dead they let their dog enter his side and come out of his mouth, then returning, enter his mouth, tear out his heart and take his liver, drawing out a great quantity of blood with him. But there was still the osprey's wife living. The children went to her home and saw her sweeping around her house under a kafua tree. The children climbed the tree, plucked its fruit and threw it at the woman. She saw the children and went to fight them but they killed her and verified her death with the dog in the same way as in the case of the osprey. Meanwhile their croton (keakea) and wetoweto trees at home began to shake and quiver and dance indicating to their grandfather what had happened. When the children came home they placed the organs of the osprey and its wife into a boat which went to the people. After this the people returned³).

It is particularly interesting to note that this story agrees even in many of its details with the analogous ogre stories. The verification of the death, in this case by the dog, has frequently been encountered, and occurred even in the Maui stories of Polynesia. In the many other ogre stories, the killing of the ogre was preceded by the climbing of the tree. From this tree a fruit was usually dropped by which the attention of the ogre was attracted. It is highly important that the croton tree with its magical properties is associated in the story with the two ogre slayers, whom we know to be representatives of the stone using immigrants. The only dif-

1) JENNESS and BALLANTYNE 417 (1927) 217 ff. 2) JENNESS and BALLANTYNE 417 (1927) 305 f, 308-310. 3) JENNESS and BALLANTYNE 417 (1927) 161-179.

ference between this story and the others is that here the mother leaves her children behind with their grandfather. And even this detail differs only in this version of the story. In the other versions which agree completely with this story although the characters have different names¹⁾, the mother is called Inelawata, and it is only this pregnant Inelawata and an old woman who are left behind when the people fled to Towakala near East Cape on the mainland. According to one version of the story, the man-eating animal is a snake²⁾.

It is of the utmost importance that, in this story, Inelawata is the mother of the two ogre slayers whom we know to be representatives of the stone-using immigrants; for in the following myth, the association of Inelawata with the stone-using immigrants is even more clearly apparent: In a cave behind Ukuni, a monstrous snake named Motalai once had its home. Inelawata, a woman, was assigned the task of feeding it with yams and taro and other vegetable food. The snake had a single circular tooth, like the boar's tusks that the natives value so highly. Once a month the people drew it out; a new one would always grow. Sometimes the snake would give them necklaces, large white cone-shell armlets, and other valuable gifts. One day Inelawata's child besought his mother to let him feed the snake. She allowed him to feed his grandfather the snake. But so dreadful was its appearance that, when the boy saw it he fled. The snake was very wroth and said: "I shall remain here no longer". So the snake departed to Kiriwina. Hence the Kiriwina natives possess much property now and the Mud Bay natives nothing. According to another version the snake went first to the Amphletts, but did not like the place. Next it tried Kiriwina, but that place also failed to please it. Finally it went to Murua and there it has remained ever since³⁾.

The following conclusions may be drawn from this story: If the snake is the grandfather of Inelawata's child, it is probably Inelawata's father. That the snake has a human child or is itself the offspring of a human woman is identical with the numerous stories we have mentioned of the New Hebrides, the figona stories of San Christoval, Malaita, Ulawa, and the analogous story of the Bougainville Strait, the only difference between our present story being that in most of the other stories the snake is female. That in the present case the snake was actually a culture hero, is not only apparent from the fact that it gave the people necklaces, shell-armlets, and circular boar's tusks⁴⁾, but particularly from the fact that the arrival or departure of the snake is said to be responsible for the

1) The father is called Galagaliwabu, and the sons Tomweinagona and Kwamanea.
 2) JENNESS and BALLANTYNE 416 158 f, 417 (1927) 70 f, 145-147). 3) JENNESS and BALLANTYNE 416 157 f. 4) How far these things themselves are characteristic of the culture of the stone-using immigrants, cannot be investigated here. It might, however, be pointed out that SPEISER has attributed to the megalithic immigrants among other elements also the breeding of tusked boars.

fertility of Kiriwina and the barrenness of Goodenough Island; this latter incident occurred in exactly the same way in the many other stories of the snake heroes. Thus, for instance, the offended Hatuibwari of San Christoval left the people by saying: "I go, but your crops will fail", and also according to the other analogous stories, the general conditions of the people deteriorated after the final departure of the culture hero. The departure of the snake, caused by offending it or the attempt to kill it, agrees completely with the stories of Hatuibwari, Walutahanga, and Bunosi. We have accumulated a great number of arguments proving that all these snakes, including the figona serpents and the many characters described as being temporarily snakes, were representatives of the stone-using immigrants, and this we are therefore now justified in maintaining in the case of the snake hero of our present story and the hero-mother Inelawata.

We can thus conclude that the mythology of Goodenough Island contains the same traces of the stone-using immigrants as are found in the many other regions which have been influenced by these immigrants, although many of the characteristic themes have here been either lost or overlaid.

Fergusson Island: Most of the sources of information are emphatic in their descriptions regarding the short stature of the people of this island, a somewhat frequent trait ¹⁾, and one which is found also on Goodenough Island ²⁾. Trading relations, including the Kula trade, exist particularly with Goodenough Island, Wedau on the mainland, the Amphletts, Trobriand, and with the neighbouring islands Tewara and Sanaroa inhabited by Dobu people ³⁾. The relations with the Trobriand Islands are particularly intensive in the Basima region. The various kinds of magic and divination, the construction of certain houses, the importance of the supreme chief, the emerging of the ancestors out of the ground, and the existence of the "balaumo" spirits, are all elements which occur here in exactly the same way as in the Trobriand Island ⁴⁾.

Here again circular heaps of flat stone slabs are to be found, about 20 feet in diameter, with a rough stone seat in the centre. These stone circles are called "gahana". Like the analogous stone circles of Goodenough and Rossel Island, the stone circles of Fergusson too are connected with cannibalism. After a raid, the prisoners, alive or dead, were brought here. If alive, the man was tied down on the stone seat, then killed and the body was cut up on the flat stones. LYONS, to whom we owe the most detailed description of these stone circles, furnishes the additional information: "Near the ... heap of stones is a large tree, called the gigimeta tree. The leaves of this tree are carefully dried over a fire till they are white, and

1) PÖCH 669 11, MURRAY 595 116, ARMSTRONG 25 XV, v. D. BROEK 95 265. 2) ARMSTRONG 25 XV f, JENNESS and BALLANTYNE 416 48. 3) JENNESS and BALLANTYNE 416 33-35, MALINOWSKI 524 45, 377, 505, FINSCH 238 II 25 etc. 4) FORTUNE 260 283, JENNESS and BALLANTYNE 416 152.

they are then attached to a stick and borne into battle as a species of flag" ¹). Unfortunately, the botanical name of this tree is not recorded, but its situation near the stone circle as well as its magical use in fighting, agree with the position and the use of the croton tree found on Goodenough Island.

THOMSON ²) is the only writer who mentions that the extensive plantations "are divided into sections by the gathering together of the surface pumice-stones".

Amphlett Islands: These islands, whose relations with the adjacent islands have already been frequently pointed out, racially resemble the inhabitants of the Trobriand Islands, and in general culture, language, and social organization are influenced by the Trobriand Islands and Dobu ³). They have extensive trading relations, more particularly with Dobu, Trobriand, Fergusson, Goodenough, and the mainland ⁴). From the data quoted so far it appears that these islands also must have been touched by the stone-using immigrants: thus Inuvaylu'a of the Trobriand Islands, when migrating with his mother from Trobriand to the D'Entrecasteaux Islands, also passed through the Amphletts; the culture-bringer snake of Goodenough Island on its migration to Trobriand also touched the Amphletts; certain immigrants came here from Goodenough Island under the leadership of Konawabu, and it has been seen that Tudava and Gere'u are known here also as they are in the Northern Massim and the D'Entrecasteaux Islands.

Owing to a continuous state of war the villages are all perched on high inaccessible ledges. An exception to this rule is the village Gumasila, of which MALINOWSKI gives the following description: "Built on a narrow strip of foreshore, open to the breakers... the village has been made sea-proof by walls of stone surrounding the houses with several bulwarks, and by stone dykes forming small artificial harbours along the sea front"; and elsewhere he speaks of "the big village of Gumasila, built on artificial stone terraces, surrounded by dykes of small stones, forming square lagoons and diminutive harbours" ⁵). This structure is the only one of its kind in this area; neither can any comparison be made between the stone-terraces of Rossel Island and this village terrace, since only one or two houses are built upon the former. This terrace is similar rather to the artificial islands, and is comparable to that type of artificial island which was built round a natural core. Stone dykes forming small artificial harbours are found on some of the other artificial islands.

Normanby Island: In this island, as on Goodenough and Fergusson

1) LYONS 712 (1923/24) 20 f, (1924/25) 15, ARMSTRONG 25 113, SELIGMAN 770 465, 556, Pl. LVIII. 2) 868 25. 3) MALINOWSKI 524 288. 4) MALINOWSKI 524 16, 47 f, 272, 287, 381 f, 505, THOMPSON 864 97, etc. 5) 524 46, 268, 287 f, Pl. VII and XLIII.

Island, many short people are found, besides the Papuan type with frizzy hair, but there are also individuals with wavy and even straight hair¹). Nothing is known about the tribes of the south coast and the interior, but the Dobuan speaking communities on Normanby Island and the other natives of the northern coast take part in the Kula, and also trade with the mainland²). It will be remembered that Gere'u, the originator of the Kula trade, on his migration from Trobriand was said to have come to Normanby Island.

In a village on the northern coast, FINSCH saw in the centre of the village place a grave consisting of 'a few slate slabs, surrounded by variegated crotons. In the branches of a very big croton, almost four feet high, I remarked a peculiar tube of sagopalm leaves; it contained six skulls, apparently of relatives, since they were not sold'³). THOMSON⁴) says that these graves were "fenced in, and planted with crotons, amaranths and hibiscus". Since the northern coast of Normanby is inhabited by Dobuans, and since this type of grave occurs also on Dobu, it is probable that the graves on Normanby Island are due to Dobuan influence⁵).

When FINSCH came to this island the people presented him with variegated crotons and red hibiscus flowers⁶), and generally "they are very fond of ornamental plants about their houses"⁷).

Dobu Island: Racially the Dobuans differ from the Southern Massim and the Trobriand Islands in possessing a very dark skin. But there are also very light-skinned people and "it is impossible to say whether the dark skin or the light skin is most admired"⁸). Their language is Melanesian⁹). The trading relations, including the Kula and the war-like relations of the Dobuans, are very far reaching and extend particularly to the Amphletts, Trobriands, Tubetube, Fergusson and Normanby. The northern end of Normanby, both sides of the Dawson Strait, and the south-eastern tip of Fergusson are in fact inhabited by Dobuans, and the Dobuan language became the lingua franca of the D'Entrecasteaux Islands, the Amphletts and the Trobriands¹⁰). The connection of Dobu with the other islands of the D'Entrecasteaux Group and the reciprocal relations between the D'Entrecasteaux Islands themselves, are evident from the Dobuan belief that the

1) PÖCH 667 385, 668 281, 669 11, FINSCH 236 216, HADDON 329 230 f, THOMSON 868 23, ARMSTRONG 25 XV f. 2) MALINOWSKI 524 39, 505. 3) FINSCH 236 218, 238 II 18 f. 4) 867 519. 5) According to WILLIAMS 952 177, the centre of the villages was occupied by the "Ariari", "a box-like structure some 4 feet high which had formerly been filled with yams, and which in the days of village burial, would have stood directly off the grave". I mention this only on account of the name "Ariari" which agrees with the word "Ariari" of San Christoval. We are, however, unable to show that this structure was formerly made of stone. 6) FINSCH 236 220. 7) HADDON 329 230 from MACGREGOR. 8) MALINOWSKI 524 40, FORTUNE 260 248. 9) RAY 700 18, RESCHKE 713 144. 10) BROMILOW 99 149, 101 475, THOMSON 868 31, MALINOWSKI 524 39 f, 381, 391, SELIGMAN 770 530, 539, JENNESS and BALLANTYNE 416 56, FORTUNE 260 200 ff.

spirits of the dead go to Mt. Bwebweso on Normanby Island, which is also the afterworld for all the other D'Entrecasteaux Islands, with the exception of the northern part of Goodenough Island whose ghosts, as will be remembered go to Tuma¹).

The ideal village of Dobu is a circle of huts facing inward to a central often elevated mound, which is the village graveyard with scattered brilliant-leaved croton shrubs upon it. "Here ... within their stone set circular enclosure lie the ... ancestors of the villagers"²).

"The boundaries (of land) are marked by small stones which indicate each person's property"³). It is improbable that this can be considered as a real stone wall. The same type of boundary marks are mentioned as existing on Fergusson Island, without definite indication as to the locality. Since we have seen that the south-eastern tip of Fergusson is inhabited by Dobuan people, it is possible that the information regarding these boundary marks applies to this region, and that this custom came to Fergusson from Dobu.

Sacred Plants. Before planting a garden, in order to increase growth and remove contamination, a magician strikes the stones and any sticks that are left after the clearing of the ground. For this purpose leaves of the cordyline terminalis are used. At a mortuary feast croton leaves are held in the hands of the dancers⁴).

Mythological evidence. In the Dobuan myths, as was also the case in Goodenough Island, there are some beings to whom are attributed deeds of creation; but not very much is recorded of these beings, and they cannot with any certainty be shown to belong to the stone-using immigrants. Thus the woman Bulelala was the first to plant yams as food. She set her daughter in the earth, where she developed various yam qualities⁵).

Eaboaine (or Yabowaine) is the creator of man and dwells in the milky way⁶). But "beyond the fact that Yabowaine... is of the Above, I could discover little about this supernatural being" says FORTUNE⁷).

Nemwadole is said to have lived, a lone woman, in a solitary forest cave, where she bore two children, which were two kinds of yam⁸). But nothing more is recorded about this woman, and in spite of some resemblances we are hardly justified in identifying her with the mother of the ogre slayers. But that this theme occurs here too, if also considerably modified, is apparent from the following myth: Tokedokeket a wicked ogre ravaged the country, so that many died. The rest of the people fled to a remote island. One woman is left alone. In a dream her mother's spirit instructs her to find Weniogwegwe, the great dog. The woman discovers the dog from which the ogre flees. He shuts himself up in his own house so long

1) MALINOWSKI 524 43. FORTUNE 260 12, 143, 180 f. BROMILOW 99 89, 90, 248, 101 483, BROWN 102 418. 2) FORTUNE 260 1 f, fig. p. 1, see also BROMILOW 100 19, MACGREGOR 520 5, mentions some stone divans at Dobu. 3) BROMILOW 101 473.

4) FORTUNE 260 110-114, 250. 5) FORTUNE 260 95, 107, 111, 117; the same myth is known also on Normanby Island. See ROHEIM 737 50. 6) BROMILOW 99 87, BROWN 102 417. 7) 260 111. 8) FORTUNE 260 124.

that he and his wife die of hunger. After this the refugees returned ¹⁾.

In the discussion on the Trobriand Islands, it has already been stated that Kasabwaybwayreta is mentioned also in the Dobuan myths in exactly the same way as on Trobriand Island ²⁾, and we have qualified this character as a representative of the stone-using immigrants. Whether the common possession of this myth is due to contact with the Trobriand Islands, or whether it goes back to a direct influence of the stone-using immigrants it is difficult to say.

The following myth shows clear association with the stone-using immigrants. A mango tree stood rooted on Normanby Island near Mt. Bwebweso and a fish came out of the tree. They decided to cut down the tree; but when they left the unfinished tree at night the chips always came together again until by chance a woman carried a slab of wood to her home and the hole closed itself up all but one piece. So they burnt the cut wood, so that the tree could not close up again. Then they let the evil-looking women stand on the tree's seaward side and the handsome ones on the tree's inland side. When the tree crashed seawards, it flung the evil-looking women inland and the handsome women seawards and into the Trobriands. When this tree was felled it stretched all the way from Normanby to the Trobriand Islands. From its roots water poured forth, covered the tree and made the sea. Tobwaliton said to Tobebeso (both are supernatural fish monsters): "You remain, I go, the mango tree to walk along". Tobebeso was a fool. He gripped the roots, so that the mango tree quivered and Tobwaliton had to return. The fish Watuatuke said: "My friend, you stay; let me go first and the islands of our grandchildren let me set down". He went and made the islands Tewara, Sanaroa, many of the Amphlett Islands and others. He wriggled and cut a lake. When the water poured forth from the mango tree, their sister charmed a shell with which they closed up the tree. The water flow ceased and the sea was formed. They took charcoal, blackened their bodies and became sharks ³⁾.

From this it is evident that a certain number of the themes which we have seen to be associated with the stone-using immigrants occur here again, although the different characters and their actions do not appear with the same degree of clearness as elsewhere. The reuniting of the chips of the tree has also been recorded in the story of Qat of the Banks Islands, and in a similar way in connection with the antagonistic Lata and Sinota of Santa Cruz. Both these myths deal with the building of a canoe, and it may be asked whether the tree stretching from Normanby to Trobriand, along which Tobwaliton wanted to go, is not simply a modified form of this canoe-building story. That this is actually the case will be seen from the Taupota version of this myth. Tobebeso is said to have been a fool who by his foolish action prevents Tobwaliton's voyage. This cer-

1) FORTUNE 260 270 f. 2) See: FORTUNE 260 216, 218-221, 223, 228 f. 3) FORTUNE 260 263-266.

tainly reminds one of the frequent antagonisms of the stone-using immigrants. Watuatuke makes the islands and, by cutting a lake, he is a physiographical shaper, two features we have seen to be characteristic of the stone-using immigrants. Finally, there occurs here again the theme of the creation of the sea by Tobwaliton and Tobebeso with the help of their sister, an incident, which even more closely equates these characters to the stone-using immigrants. FORTUNE, as we have mentioned, is of opinion that it is impossible to say whether dark or light skin is most admired by the people. It is not improbable, however, that the judgment pronounced in this myth regarding the beautiful Trobriand women and the ugly women of the interior, applies to this difference of skin colour. If this is so, it is probably not without significance that this judgment and the attempted explanation of the causes of the difference in colouring, are expressed precisely in a myth which we think to be connected with the light-skinned stone-using immigrants.

The myths thus confirm the impression that Dobu has been touched by the stone-using immigrants, that this influence was, however, either of short duration only, or that it was eclipsed by the dark-skinned Melanesians. This agrees with the impression one gains from the general culture of Dobu; thus, for instance, it is striking to note that chieftainship is of little importance in Dobu in comparison with the Trobriand Islands¹), and this is borne out by the racial composition of Dobu with its preponderance of very dark-skinned elements.

A word must be said about Tauwau who, in one capacity, is the mythological creator of the white race and of the white man's artifacts, a being responsible for the spread of the white man's diseases in another²), and in a third capacity originally a native of Tewara Island who made the Kula, but who had a feud with Kasabwaybwayreta and left Tewara for the white man's country. So any white man may be referred to as a tauwau³). From this relation with the white man, FORTUNE has drawn the conclusion that "Tauwau is a mythological person of recent extraction"⁴). But elsewhere FORTUNE records⁵) without, however, committing himself: "I have heard from a visitor to Dobu a theory that Tauwau is a Dobuan culture hero symbolic of a Polynesian immigration". It has already been seen that the Trobriand culture hero Tudava whom we have shown to be a stone-using immigrant, ended his career in the white man's country, and it has been pointed out that this may suggest that he himself was light-skinned. We can see no reason for not applying this conclusion also to Tauwu of Dobu. It is certain that the relation of Tauwu with the white man cannot but be a "recent extraction", but in view of the data mentioned, there is not the

1) MALINOWSKI 524 41, FORTUNE 260 36, 83-85. 2) According to the Trobrianders' belief the tauva'u are anthropomorphic beings who cause epidemic diseases in the Trobriands, and they are said to come from the north coast of Normanby. MALINOWSKI 524 76 f. 3) FORTUNE 260 136, 230. 4) 260 230. 5) 260 136.

slightest reason to suppose that Tauwu himself is a character of recent creation. It has been seen that one of the most characteristic incidents of the stone-using immigrants is their final departure from the world with which the natives are acquainted to some far remote country not known to them, and we shall explain later the reason for this continually recurring event. If it is true that the stone-using immigrants and introducers of a new culture were light-skinned—and all the existing data are unanimous on this point—it must have been quite natural for these natives to conclude that the country of the Europeans—these modern immigrants who likewise were light-skinned and were also culture-bringers as were those they had hitherto known—was precisely the country to which their former culture-bringers had disappeared, a country so far unknown to them. We have already mentioned a number of cases in which the first Europeans were regarded by the natives as their returning megalithic culture heroes, and although I am far from asserting that this identification, in all cases, points to the existence of stone-using immigrants, I think greater attention should at least be paid to it than has been the case up to the present. The fact that Tauwau of Dobu is associated with Kasabwaybwayreta whom we have qualified as a stone-using immigrant, and that he finally left his home Tewara, as did all the other stone-using immigrants, can only fortify our opinion that Tauwau belongs likewise to the stone-using immigrants, although so little is known of him. Therefore it is probable in my opinion that the "visitor to Dobu" (FORTUNE does not say who it is) who suggested that Tauwau is "a Dobuan culture hero symbolic of a Polynesian immigration", was not mistaken, since the name "Polynesian" has so far been used frequently to designate those immigrants whom we have shown to be the megalithic people and who actually must have migrated to Polynesia after having crossed Melanesia.

We have now finished our investigation of the Melanesian archipelagoes and are sufficiently prepared for the study of the great mainland of New Guinea. As our knowledge of this latter area is less extensive we have ample justification for studying it so late in our investigation.

NEW GUINEA

We shall begin with the north-eastern part of the island since in race, language and general culture it belongs to the Massim District with which it is historically and commercially related. The racial characteristics of the area *from Milne Bay to East Cape* resemble those of the D'Entrecasteaux Group; here, too, short and dark-skinned people are found ¹⁾ as well as many with light skin and wavy hair ²⁾. The language is Melanesian containing Papuan elements, as in the Massim District ³⁾. Traditions speak of im-

1) MORESBY 580 245, ARMSTRONG 25 XV, HADDON 329 220. 2) FINSCH 326 234 f.
COMRIE 168 106, HADDON 329 220, 261, CHALMERS 127 143. 3) FINSCH 236 267,
238 VI, 17, RAY 700 18, RESCHKE 713 144, MACGREGOR 520 98.

migrations to Wagawaga from East Cape, Basilaki, and a little island off Rogeia ¹). Trading relations, including the Kula trade, exist with Tubetube, Basilaki, Rogeia, Samarai, the D'Entrecasteaux Islands, etc. ²). Of particular importance are the old trading relations between Milne Bay and the adjacent region west of it, and the south coast, especially with the region about Mullin's Harbour and its neighbouring area in the east. HIGGINSON records the following ³): "There can be said to be four direct overland routes on the south coast. The first into the head of Milne Bay; the second from the vicinity of the western side of Mullin's Harbour over the main range... crossing direct north into the Magavara and Didia districts of the north-east coast. The third crossing... into the headwaters of the Ruabo, across the main range... This crossing is between Mt. Simpson and Mt. Thompson. The fourth crossing is... to the westward of Mt. Simpson". These trade routes cannot have been without influence upon the general culture of the south coast as will appear later on.

In many villages of Milne Bay, e.g. Wagawaga, Barogofigofi, Tagorewa, etc. there are stone circles, called here, as on Fergusson Island, "gahana", which must not be approached by women. There are two different kinds of "gahana", viz. those exclusively for cannibalistic purposes, and non-cannibalistic "gahana". In the case of the cannibalistic "gahana", the victim was lashed to the tree, usually a coconut, which always stood in these "gahana". The corpse of the victim after having been cut up in the "gahana", was eaten partly within and partly without the "gahana". One cannibalistic "gahana" at Wagawaga consists of a circle of blocks of coral rock loosely piled upon each other to a height of about two feet. The non-cannibalistic "gahana" were the squatting and debating places of the men of a clan. Of Wagawaga, SELIGMAN says ⁴): "I did not hear of strangers being received in the non-cannibal gahana at Wagawaga, but this may have occurred". In Barogofigofi, a bush settlement behind Wagawaga, Chester and Chalmers when entering the village were received at the "gahana" stone circle within which the men were sitting ⁵). ATKINSON ⁶) gives the following description of the "gahana" of Tagorewa village on the north side of Milne Bay: It was "an ancient council meeting-place consisting of a number of stones erected in a circle, one of the stones being much larger than the rest. At the large stone it is said that the two head men sat, and the lesser chiefs sat around the circle. No woman was allowed to enter the circle, as it was here, in days gone by, that all matters of importance were decided. Near one of the stones is a hollowed out stone, never removed from the place, which the chiefs used as a kind of bowl for mixing up the pigments for painting their faces and bodies... When the large stone mentioned was

1) SELIGMAN 770 425-427, 468, 481, 622. 2) SELIGMAN 770 535, 553, 586 f, MALINOWSKI 524 505, HADDON 329 219. 3) 712 (1920/21) 53, see also SELIGMAN 770 646. 4) 770 464. 5) SELIGMAN 770 424, 462, 464, 556 f, Pl. LVII, fig. 34: Plan of Wagawaga; 775 8 f, 776 53, CHALMERS 127 144. 6) 712 (1931/32) 18.

being erected... a number of small babies were killed, put into the hole and the stone erected... No meetings have been held in the circle of stones within living memory". Unfortunately, we have not a more detailed description or any picture of this stone bowl, but it seems probable that it was similar to the other stone bowls found which we have attributed to the culture of the stone-using immigrants. In these circumstances, it is highly significant that this stone bowl was found near the stone circle.

Annual Report 1920/21, photo p. 133 shows a "grave of a native girl, Maivara, Milne Bay". From this it can be discerned that the grave, on which a little hut is erected, is either surrounded by or covered with stones.

Sacred Plants. We have very little information about sacred plants in the Milne Bay District. It has been mentioned that in the "gahana" a coconut tree was planted to which the victim was lashed. It will be remembered also that a tree with magical properties was planted within the stone circles both on Goodenough Island and Fergusson Island. In the first case this tree was a croton, and in the Fergusson "gahana" it was the "gigimeta" tree. We can therefore infer that the coconut tree within the Milne Bay "gahana" was also considered as a sacred plant, although our source of information is not explicit on this point. This shows that the coconut, whose introduction we have attributed to the stone-using immigrants, and which occurred often in their ritual life, appears here again in the same capacity. At a cannibal feast in Wagawaga, the warriors perform a dance in which they carry skulls of previous victims decorated with croton leaves; at East Cape, croton and dracaena are used as ornamental plants, and in Mita village the people presented FINSCH with croton leaves. On graves "pretty shrubs" were planted¹⁾.

Prehistoric objects. SCHURIG relates the oral information of a planter according to which ornamented potsherds were unearthed near East Cape, a region where pottery does not exist to-day²⁾. Although this information is not confirmed by any other writer, it is quite probably accurate in view of the other finds made on the northeast coast which we shall describe later on.

Mythological evidence. In Wagawaga a few ogre stories are known, but they contain none of those characteristic incidents which we have hitherto come across in stories of this kind³⁾. Of one of these giant ogres called Kuporu the story relates: "One day, near Modewa, many white men came from a schooner in two whale boats, and they sought Kuporu and killed him"⁴⁾, but we have no possibility of knowing whether these white men were other than Europeans.

The origin of the first coconut out of the skull of a woman is narrated here⁵⁾, but the details of the story are quite different from those of the

1) SELIGMAN 770 557, 585, NEWTON 617 44, FINSCH 236 273, MORESBY 580 219.

2) SCHURIG 841 31. 3) See SELIGMAN 770 389-392. 4) SELIGMAN 770 390 f.

5) SELIGMAN 770 380-382.

other analogous stories, and the woman of this story has none of the characteristic features of stone-using immigrants.

In the discussion on Sudest Island, it has been mentioned that the story of Tamudulele, the typical culture hero of the stone-using immigrants, is known as far to the west as the D'Entrecasteaux Islands, and that Tamudulele is identical with the culture hero Taifo. Now, in Milne Bay, Taifo (Taufwo at Wagawaga) is recognized as the originator of pigs, and pilgrimages are made to the stone of Taifo in Bohutu (a tribe between the head of Milne Bay and Mullin's Harbour) where his ghost resides. A small white pig is said to be occasionally seen at this stone. The stone is Taifo's body¹). Unfortunately, we are not told what this stone was like, neither have we very much information about the stone relics of Tamudulele in the Calvados Islands mentioned before, and to which sacrifices were offered. But the fact that Taifo is represented by this stone, and that this stone is even Taifo himself, agrees with the function of the numerous monoliths of Melanesia which were also regarded either as representing the ancestors or were their resting places. Can we infer from this that these stones were monoliths? Whatever the conclusion may be, it is clearly evident that Taifo, the introducer of the pig, is a stone-using immigrant.

It is of particular interest that, according to the Wagawaga belief, the other world, Hiyoyoa, which lies under the sea near Maivara at the head of Milne Bay, is presided over by Tamudurere²), which is evidently only a slightly different pronunciation of Tamudulele. A number of other stone-using culture heroes have already been found in this capacity. Now, SELIGMAN makes the very important remark regarding Tamudurere, namely: "he and his wife and children are white-skinned and smooth haired"³). From this it is evident that racially Tamudurere corresponds to the other stone-using immigrants of Melanesia who were also light-skinned, and like them (since Tamudurere is identified with Taifo) he is the introducer of the pig.

Bentley Bay: The racial and cultural conditions of Bentley Bay, Awaima (Chads Bay), and Taupota west of Milne Bay, are the same as those of Milne Bay. Here again light skin is frequent, and wavy and even straight hair occurs⁴). The language also is Melanesian as in Milne Bay⁵). Trading relations exist with Milne Bay, the D'Entrecasteaux Islands and with Teste Island⁶).

In Bentley Bay, FINSCH found in front of the houses flat stone slabs upon which the men used to take a siesta⁷). This would seem to correspond to the non-cannibalistic "gahana" of Milne Bay. BADEN-POWELL⁸), writing of the natives of Chad's Bay, says: "In more important villages, certain

1) ARMSTRONG 712 (1920/21) 44. 2) SELIGMAN 770 655; in Bartle Bay he is called Tamuduriri. 770 658. 3) 770 655. 4) FINSCH 326 234 f, 238 II 16. 5) SELIGMAN 770 377, 575, 631, MACGREGOR 520 98, RAY 700 18. 6) FINSCH 236 238, 238 II 15. 7) FINSCH 236 238, 238 II 17 f. 8) 34a, 161, quoted also by THORPE 872a, 484.

number of slabs placed in ring in centre of village... often upright stone behind as a back rest". SELIGMAN's Plate LVII shows a reconstruction of the non-cannibalistic "gahana" at Taupota which in every essential resembles that still existing in Wagawaga. A shallow pottery vessel full of water was formerly kept in the centre, and was used, as far as SELIGMAN could ascertain, as a mirror by the men who frequented the "gahana"¹).



Fig. 20. Stone circle at Taupota (After SELIGMAN 770 Pl. LVII).

Sacred Plants. The villages of Bentley Bay are sometimes surrounded by hedges of croton plants, and near almost all the graves crotons were planted²).

Prehistoric Objects. In Bentley Bay, FINSCH saw in front of a house a big stone ball, "to which, however, owing to my great hurry, I could pay no attention," he says. In his opinion this should perhaps be classified with the stone bowls of New Guinea³).

Mythological evidence. In Taupota, the following myth is known, which agrees almost completely with that of Dobu whose numerous elements we have attributed to the stone-using immigrants. A man named Duagau when hunting with his dog found a fish inside a huge modewa tree. He climbed the tree and found its trunk was hollow, and that a lot of fish were swimming about inside the tree. Duagau took the fish home and gave them to his old mother. She found the fish so good that she ordered the men to chop down the tree to get more of the fish. So the

1) SELIGMAN 770 465. 2) FINSCH 236 238. 3) FINSCH 236 231 note 1.

men of the two clans Lavarata and Aurana went, with Duagau as leader, and chopped the tree, but when evening came and they went away all the chips grew together again. This happened again and again, until a little boy took a large chip to play with. In the morning the men found that the hole in the tree had closed all but that chip. So they burned all the chips, and felled the tree. As it crashed to the ground a great mass of water gushed out and spread over the low-lying land. On the following day the Lavarata clan lied to the Aurana clan saying that they wanted to go and dance. But while the Aurana clan was dancing, the Lavarata clan went in secret to where the tree lay, taking with them all the best ornaments and pots and weapons and nets in the village. They pushed the tree trunk into the water and used the branches as paddles, and they were able to live within the hollow trunk of the tree, on account of its great size. The men of the Aurana clan saw them disappearing away to the north-west, and there were no fish and no utensils of any sort left to the Aurana. Now the people of the Lavarata clan had light-coloured skin just like albinos. The Aurana people waited for them to bring back the utensils and weapons they had taken, but they waited in vain. When the white people came to Taupota, everyone knew that they were the descendants of the old Lavarata clan; because their fathers had taken all the utensils and weapons, they had grown wise and become people of property, while the Aurana and other folk had stayed as they were¹).

The origin of the sea out of a tree in which there are fish, agrees with the Dobu story. It is in compliance with the wish of the old woman, that this tree from which originates the sea, is felled. This corresponds to the creation of the sea with the help of the sister of Tobwaliton and Tobebeso of Dobu, and the part played by the old woman in the creation of the sea in the numerous other myths of the stone-using immigrants. The growing together again of the chips of the tree occurs here in precisely the same manner as in the Dobu myth, the Qat myth of the Banks Islands and the Lata-Sinota myth of Santa Cruz. The Banks Islands and Santa Cruz myths told of the building of a canoe, and we have inferred that this was also the theme of the Dobu story. The Taupota version confirms our assumption, since the Lavarata people use this tree as a canoe and its branches as paddles. The conflict between the Lavarata and the Aurana is reminiscent of that between Tobebeso and Tobwaliton. As in the Dobu myth, it is probable that here, too, we are confronted with the familiar theme of the antagonists characteristic of the stone-using immigrants, the only difference being that in our present story the two antagonists are not said to be brothers but actually two different peoples, tallying with RIVERS' view that it was due to the contact of two different peoples that the story of the two antagonistic brothers has developed. The superior Lavarata who, like all the other stone-using immigrants, finally departed

1) SELIGMAN 770 402-404.

from the world taking with them all good things, are definitely said to be light-skinned, and are therefore also identified with Europeans¹⁾.

From Bartle Bay to Goodenough Bay: The racial characteristics of the Bartle Bay people are the same as those of the adjacent districts and the D'Entrecasteaux Islands. Besides the darker elements, there are light-skinned individuals with "finer features recalling a type by no means uncommon on the Marshall Group"²⁾. The language of the whole of this coastal region is Melanesian³⁾. These Melanesian inhabitants of the whole of Goodenough Bay are called by Pösch "the Melanesian immigrants from the D'Entrecasteaux Islands" on account of their cultural and social similarities with that group. Their immediate neighbours in the interior are Papuans. The proximity of these two different peoples is evident from their general culture also, and is particularly manifest in the construction of houses⁴⁾. The inhabitants of Bartle Bay intermarry with the people of Wamira, Wedau, Gelaria, Cape Frère, and Lavora⁵⁾.

Of Bartle Bay, SELIGMAN gives the following record⁶⁾: "A number of stone circles and lines of stones exist scattered among the Wamira settlements. Both the circles and lines of stones are called bolabola, and obviously correspond to the gahana of Wagawaga in Milne Bay. Unfortunately, the connection existing between stone circles and cannibalism at Milne Bay was unknown at the time of the visit of the expedition to Bartle Bay, where lack of time prevented an adequate inquiry into the cannibalism which formerly prevailed there. It is, however, certain that particular bolabola, notably that at Irere (Wamira), were used during cannibal feasts. Concerning this circle Mr. NEWTON writes: "The body was taken to the bolabola and there cut up, taken to the shore, washed in fresh water and brought back to the bolabola, where it was cooked and eaten." ... The bolabola consisting of rows of stones, were, I believe, entirely unconnected with cannibalism and were simply squatting places. A few of the stones of these bolabola as well as some of those entering into the composition of the stone circles bore lightly incised designs ... a scroll design, ... a small circle with radiating hook-like processes ... or a cross⁷⁾. The Irere bolabola forms a circle some 16 feet across ... It was said that certain of these stones had names, thus one incised stone was said to be called Garuboi ... No woman may approach a bolabola ... The centre of a stone circle ... formerly ... was occupied by a large

1) The theme of the clam shell occurs also in a Taupota story, but in a manner differing from that of the other clam stories; a man who wants to get rid of his wife, orders her to dive for a clam shell, as a result of which she is killed. SELIGMAN 770 397 f. 2) SELIGMAN 773 271, MORESBY 580 268. 3) SELIGMAN 770 431, RAY 702, 404 Note 1. 4) See Pösch 668 283, 669 5, 672 162, 677 612. 5) SELIGMAN 770 505, 524. 6) SELIGMAN 770 464-466, 547, 559 Note 2, CHINNERY 151 278. 7) Another incised stone of Wedau, two feet long, which was set upright in the ground, is pictured by WILLIAMS 950 fig. 5 p. 134, 135, but we are not told whether this stone was one of a stone circle or not.

shallow pottery dish ... brought specially for the purpose from the east ... where pottery was made. This dish was not taken into any house except perhaps the club-house before being brought to the bolabola." Its use is not described by SELIGMAN, but this is identical with the pottery vessel kept in the centre of the Taupota "gahana", and it reminds one of the use of the stone bowl near a "gahana" in Milne Bay.

In Bartle Bay, stones are sometimes set up at the head of a grave, or a stone heap is erected upon the grave¹).

In Wedau, the bolabola stone circle as well as the straight bolabola, seem to have had no connection with cannibal feasts, but were mainly meeting and debating places for the men. This corresponds to the non-cannibalistic "gahana" of Milne Bay²).

In Boianai, a few stone circles were found by WILLIAMS. The stones were embedded in the foundation of heavy gray pebbles. They were set more or less upright, and many of them were deeply carved. WILLIAMS' record is of particular interest, since he made excavations within one of these stone circles, but, unfortunately, was unable to terminate his work there. He gives the following record³): "I have only attempted one excavation in the Boianai region. This was in the stone circle called "Wakeke's House" in Boianai itself. The stones which constituted the circle were reputed to be the remains of the posts of the dwelling of Wakeke, the local hero... I proceeded to excavate... but... the people... thought that some dire results would follow... and... asked the missionary to intervene. In accordance the excavations were filled in on the following day. The work done only sufficed to show that the stone circle was a place of burial. Partial remains of five individuals were found, three being covered by pots. It was impossible to determine whether these latter were merely skulls buried in pots, or whether they were sitting burials in which a pot was used to cover the head. The pots did not possess any characters to distinguish them from those seen in Boianai at the present time".

These data are additional proof of the fact already frequently confirmed that the same stone-using immigrants who overran the Massim District also peopled the north-eastern part of New Guinea. There is no doubt that we are here confronted with the same type of burial as in the Trobriand Islands. There, too, bones and potsherds were found in the stone-enclosures

1) SELIGMAN 770 615; the placing of large stones on the top of a grave is also usual with the Gwedi-Gwedi, and their neighbours the Gwoira in the hinterland of Goodenough Bay. In both these cases, the record indicates that this is only meant to be a protection against pigs (712 (1921/22) 153 f) and until more is known regarding the influence of the megalithic culture on these tribes, we have little to say in contradiction of this explanation. 2) SELIGMAN 770 465 f Note 1, 559 Note 2. With regard to the straight bolabola of Wedau, NEWTON says: "The straight bolabola is quite modern having been put there by order of Government". Quoted by SELIGMAN 770 466 Note 1. 3) WILLIAMS 950 135, 138, Pl. X fig. 1 and 4, see also: NEWTON 617 171, CHINNERY 151 277.

which, however, were different in form from the stone work now under consideration. The question there was whether we had before us a pot burial, as in the case of the analogous prehistoric sepulchral pots found on Trobriand and Murua which we have attributed to the same culture, or whether we were in the presence of a burial in the sitting position in which the skull or some other parts of the body were covered with pots. It is almost tragic that the excavations of WILLIAMS, which alone could have given a definite answer to this important question, were not brought to a conclusion; and when he says "it was impossible to determine whether these latter were merely skulls buried in pots, or whether they were sitting burials in which a pot was used to cover the head", he is faced with the same dilemma as we were. Although no definite answer will be possible until further investigation has been made on the spot, the following facts should nevertheless be taken into consideration: in the cases in which sepulchral pottery has been found (Trobriand and Murua) this was not connected with earth-burial but with exposure in caves and cavities. On the other hand, in both the cases where we were confronted with megalithic graves (the dolmen grave of Ambrym and the dolmen grave of Kabat of Mewun) in which potsherds were found, burial was in the sitting position, and from the mythological record about Kabat we learned that the pots were put on the head, knees, and buttocks. In these circumstances, it is more logical to suppose that in the other megalithic graves in which bones and potsherds were found, the type of burial was rather that of the sitting position than pot burial—a method unknown in a megalithic grave as far as our knowledge goes.

If this conclusion is accepted, and if, accordingly, we are confronted with burial in the sitting position in Goodenough Bay (in a stone circle), in Trobriand (in the stone-enclosures), and in Buin, Ambrym, and Mewun (in dolmens), the uniformity of this far-reaching culture of the stone-using immigrants from New Guinea to the New Hebrides would be proven. Or, in other words, the same Ambat, who brought the megalithic culture to the New Hebrides, must also be its introducers into New Guinea, which was merely a halting place on their migrations to the east.

A few stones of the Boianai stone circles were carved with spirals, concentric circles or small circles with radiating hook-like processes¹⁾ similar to the incisions found on the Wamira stones. WILLIAMS, who was not aware of the megalithic character of these stones, considers them merely as "petroglyphs", and his work is a compilation of rock paintings and rock carvings in New Guinea in which are also included the incised megaliths of Boianai. Whether such a typological proceeding is justified, we are unable to judge until later when we discuss the subject of petroglyphs in the whole of Melanesia, and particularly the question as to what culture we can attribute them.

1) WILLIAMS 950 135, PL X fig. 1, 2, 3, 4, CHINNERY 151 277.

Another "carved stone from Boianai" is described and pictured in the *Annual Reports*¹⁾, but no details are given as to the circumstances in which it was found. But from the fact that the incisions on the stones are the same and, further, since the carved stone of the *Annual Reports* was said to be "connected with a personage called Wakeke" in the same way as the stone circle of Boianai, it may be concluded that these carved stones belonged also to a stone circle.

Sacred Plants. Our information on this subject is very meagre. At the walaga feast, the connection of which with the megalithic culture will be discussed later on, the women wear croton leaves in their petticoats and waistbands. The spaces between the houses in the Goodenough Bay region are occupied by "ornamental trees and shrubs"²⁾.

Mythological evidence. In Wamira, Awaiama, Taupota, and Boianai there is the following myth containing elements we have so frequently attributed to the stone-using immigrants. There was in former times an enormous pig which ate people, so that the villagers in fear crossed over to the islands. Now, there was a certain woman great with child, and she dared not embark in the canoe, but dug out a hole in a hollow tree stump and remained there. After a few days she gave birth to a son. When he had attained full manhood he killed the pig. He plucked out the bristles of the pig and put them on a raft. The raft floated away to the country of the exiles, who recognizing that the pig was dead, returned to their country³⁾.

Another myth of Goodenough Bay relates: A boa constrictor gave birth to a daughter who looked like an ordinary girl. When she was full grown, she began to go to other people's gardens and to steal food, until a man discovered her and took her as his wife. After a while she bore a son, and once when she went to the gardens and her husband remained by the child, the snake came along, coiled herself under the net bag of the child and licked the child. When the woman came home they all remained together. Once when the man and his wife went to the gardens, the snake took the baby and lengthened its legs so much that not only could it stand and walk, but it ran about and played outside the house. When the woman and her husband came home, the mother did not like the change in the child, so the snake shortened his legs. Once the woman ordered her mother to go to the gardens. So the old snake went off to work, and she broke off a single leaf of orabu and it became orabu buds, and a single leaf of sugar-cane became a stack of sugar-cane, and a taro leaf became a heap of taro; and then she went home again. When they reached the gardens they

1) 1924/25 15, Appendix I, Pl. II, III, IV; another by ETHERIDGE 233 27, Pl. VI fig. 3; quoted also by CHINNERY 151 277; the stone is 16 inches long, 11 inches wide, 6 inches deep; the incised spiral is 10½ inches in diameter and consists of 6 whorls. See also: VOGAN 910 100 and fig. 6, regarding the analogous stones of Dogura.
2) SELIGMAN 770 595, THOMSON 868 173. 3) SELIGMAN 770 414 f.

found as much food as there had been before. "And this is why the mountain people have plenty of food" ¹). Here again we have the frequent theme of the snake which has a human child, a theme we were able to attribute to the stone-using immigrants. The story differs from the others only in that the husband of the snake's daughter does not kill the snake when it approaches the child. The wonderful capacity of this snake to multiply food shows that it was a culture hero, similar to those of the analogous stories of the New Hebrides, the figona stories of the Solomons, and the Goodenough Island story, in most of which the fertility of a certain region was ascribed to the benevolence of this snake. In our present story, however, no mention is made of any migration of the snake as it is in some of the other stories of these cultur-hero snakes. The miraculous growth of the child caused here by the snake is reminiscent of many of the stone-using immigrants who grew up miraculously as soon as they were born.

This belief in culture-bringer and creator-snakes which we have shown to be part of the culture of the stone-using immigrants, appears here also in another form. At Gelaria, Garuboi is the snake totem of the Garuboi clan, which is the most important of the community. To the south-west of Gelaria is a mountain on whose peaks was born the snake Garuboi, who "made us, the beasts, earth, and we know not what other things", and it was he who long ago separated mankind into clans ²). It has been seen that one stone of the stone circle of Wamira was called "Garuboi", pointing thus to a connection between the creator-snake and megalithic stone-work. The probability of such a connection is confirmed by the fact that the stone circle of Boianai was called "Wakeke's House", and another stone, which probably also belonged to a stone circle was "connected with" Wakeke. Now, *Annual Reports* 1924/25 p. 15 furnishes the following information regarding Wakeke: "Wakeke seems to have begun life as a snake about six inches long and lived originally at a place called Baniara between the villages of Radava and Meitepana (i.e. on the coast of Goodenough Bay). After a variety of adventures he returned to Baniara and there he founded the Boianai tribe". These migrations of the creator-snake, about which, unfortunately, no details are recorded, resemble those of the figona Hatuibwari, Walutahanga, Bunosi, and the snake Motalai of Goodenough Island. It has further been seen that according to the Malaita, Guadalcanar, and Florida belief, the figona was considered as the creator of the megalithic "pirupiru". It seems therefore permissible to conclude that Wakeke, Garuboi, the figona serpents and the other snake-like culture heroes are identical, and to see in all of them representatives of the stone-using immigrants. The mythology thus proves the same uniformity of the culture of the stone-using immigrants as that apparent from the stone-work, the prehistoric objects, the disposal of the dead, etc.

It might be added that, according to a Dogura myth, the coconut originated

1) SELIGMAN 770 408-410. 2) SELIGMAN 772 163.

from the skull of a woman¹⁾ which theme corresponds to the other analogous myths on this subject, and particularly to the Wagawaga version. Eaboahine is also known in Bartle Bay²⁾ just as in Dobu.

From Cape Vogel to the Musa River: A narrow strip of the coast west of Cape Vogel is inhabited by the Mukaua, Raqa, Wanigela, Rubi, Ubir, and the Arifami, all of whom are Melanesian speaking tribes³⁾. It is common knowledge that Cape Nelson is the point where Melanesian and Papuan languages meet, and that it forms the western limit of the Massim District. From west of Cape Nelson to the British boundary, all the languages are non-Melanesian in character⁴⁾, but in the immediate neighbourhood of the Melanesian speaking tribes, and even on the coast, Papuan speaking people are also found, such as the Pem⁵⁾. The Maisin, who originally came from the Kosirava District, speak a Papuan language which, however, on their migration to Collingwood Bay, became mixed with many Melanesian elements, and the Seramina, Kokila, and Manukolu of the Wanigela River District also speak Papuan languages⁶⁾. The Melanesian speaking Arifami are lighter skinned than their neighbours, and "it is generally agreed that the Papuan speaking tribes east of Cape Nelson have not the tall stature and notable physique of the Binandele speaking tribes, nor do their languages resemble those of the Binandele stock. Probably they are to be regarded... as arising from the mixture of Papuans and Melanesians, and to be classed as Papuo-Melanesians"⁷⁾. The warlike relations of the Ari extend to Goodenough Bay, and the Maisin extend their trading relations to several parts of Collingwood Bay as far as Cape Nelson⁸⁾.

Regarding Mukaua, SELIGMAN records that in none of the villages are there stone circles, although stone is abundant in the vicinity⁹⁾. That this region also has been touched by the culture of the stone-using immigrants is proved by the prehistoric objects which were found somewhat further to the west. In Wanigela, during the construction of a mission station while the ground was being levelled, a series of mounds, 10 or 12 feet high, and from 50 to 600 feet in length, were cleared away. Within these mounds at the depth of 4 feet "a very extensive deposit of ancient bones, skulls, carved shells, and pottery was discovered. The bones and skulls crumbled as soon as exposed to the air". The quantity of ancient broken pottery was considerable. The pottery was much superior to any now made, and the people were entirely ignorant by whom it was made. The

1) NEWTON 617 173 f. 2) SELIGMAN 770 650. 3) RAY 702 404, 703 68, NEWTON 617 52, HADDON 325 438, SELIGMAN 773 265. 4) MURRAY 595 108, RAY 702 397. 5) MURRAY 595 108. 6) STRONG 849 302, 852 381-383, RAY 700 20, 702 398, 403, 405, 703 71 f, 82. 7) SELIGMAN 773 265, 267. 8) 712 (1924/25) 41, MONCKTON 576 173. 9) 770 740, 744; it is recorded of the Ari that: After a raid "they would then return... and land at the place, which is still known as Sirage Kapakapuna, literally the place where they cut up and cook strangers". 712 (1924/25) 41. But no details are given.

art of carving in hard shells is now not practised¹⁾. PöCH, who later excavated another mound on the same spot, made similar finds, of which he gives the following description²⁾: "About one metre beneath the surface, I came upon four human skeletons which, to judge from their position and completeness, had been buried there". Further, PöCH found potsherds and pot handles, and the same carved conus shells. Also a few earthenware imitations of club heads were found³⁾ which SELIGMAN takes to be ritual objects, whereas FINSCH thinks they are cheap substitutes for real stone clubs⁴⁾. The identity of these finds with those mentioned before is obvious, since they agree in numerous details. Unfortunately, PöCH has not described the position of the skeletons, but with regard to the fragments of pottery SELIGMAN and JOYCE⁵⁾ make the highly important remark that they were made by the coiling method, and PöCH furnishes the additional information that the pots must have been of remarkable size. These two facts confirm that this pottery belongs to the culture of the stone-using immigrants. It might be mentioned that JOYCE⁷⁾ has drawn attention to the striking similarity of these potsherds with those of the Japanese Neolithic, a similarity of material, ornamentation, and the existence of handles. HEINE-GELDERN⁸⁾ has shown that his Austronesian "Vierkantbeil" culture migrated from the Malay Peninsula over Borneo, the Philippines and Formosa, and finally also to Japan. Now, this "Vierkantbeil" culture, as will be shown later, is identical with the culture of the stone-using immigrants, or at least forms one of its component parts. As a matter of fact, HEINE-GELDERN has attributed the modelling method to his "Vierkantbeil" culture, but this study has so far shown that it is the coiling method which belongs to the culture of the stone-using immigrants, and this will be confirmed in the course of this work. In these circumstances, the similarity between the Wanigela potsherds and those of the Japanese Neolithic is probably not a casual coincidence, but is in fact due to a genetic relation.

The genetic connection of all the prehistoric objects mentioned here with the megalithic stone-work of North-east New Guinea is further confirmed by the fact that the incised patterns of both are identical or nearly so. The carved shells, as well as the potsherds of Wanigela, have incisions in recurved spirals; the carved stones of the Boianai stone circles have concentric circles, spirals, and conjunctions of several spirals; the stones of the Bartle Bay stone circles bear incised scrolls and circles with radiating hooks, and the prehistoric sepulchral pots of Kiriwina also have spiral incisions. On the other hand, PöCH and WILLIAMS have pointed out the similarity of these designs with those of modern Massim art

1) CHIGNELÉ 142 20, MONCKTON 577 117, Pl. p. 116, 118, 122, 712 (1904/05) 33, ETHERIDGE 233 27 f, HADDON 317 112, SELIGMAN and JOYCE 777 329-331, 333-335, Pl. VIII fig. 3, 4, 5, X-XIII, CHINNERY 151 275. 2) 669 2, 674 68-71, Pl. 7, 8, 675 138 f. 3) SELIGMAN and JOYCE 77 335. 4) 236 260. 5) 777 335, also quoted by HADDON 317 112. 6) 674 70, 675 139. 7) 422 546. 8) 349.

in which, as HADDON demonstrated, spirals and circles are common ¹⁾).

Regarding the history of Wanigela, PöCH has expressed the following opinion ²⁾: "For the time being... one may consider this vanished village of potters as a colony of the Massim District tribes. One should not, however, connect indiscriminately the art and inhabitants with the present art and present inhabitants, but with their ancestors". PöCH is of opinion that these people came by sea and penetrated inland, an opinion which has likewise been expressed by CHINNEY ³⁾. We have shown that the people whom PöCH has in mind are our stone-using immigrants, and we have demonstrated that similar types of stone-work, the identical prehistoric objects, the same use of sacred plants and finally the same myths occur in the whole of the Massim District and in north-eastern New Guinea. Therefore, it is in fact highly probable that the stone-using immigrants from the Massim District penetrated into the mainland.

Other clear traces of the existence of the stone-using immigrants will be found on the coast further to the north-west, and it is not impossible that the stone-using immigrants of Collingwood Bay belong to this group. For the following reasons it is, however, improbable that the stone-using immigrants of the north-east end of New Guinea came to this region from the north-west along the coast: the general culture, language and trading relations of North-east New Guinea point to the Massim District; whereas there are no mythological data linking the megalithic culture of north-east New Guinea with a north-western culture of the coast, there are some traditions pointing to the Massim District as its former home. These traditions are, however, somewhat scarce, and some apply to recent migrations. Thus the Ari (near Cape Vogel) say that the sea-hawk, whose connection with the stone-using immigrants we have frequently observed, and whom they consider as the "father of the Ari tribe", came to them from Goodenough Island ⁴⁾. In the Mukaua District which belongs to the tribe of the Ari, one settlement is said to have immigrated "from the north across the sea", which also points to Goodenough Island. Another settlement of the Mukaua District, the people of Kurakura, are said to be strangers "who came from one of the D'Entrecasteaux Islands" some eighty years ago, while another Mukaua settlement was formed by people coming from the south-east ⁵⁾. Although we have no further details about this latter tradition, it is possible that a body of stone-using immigrants is meant. It will be remembered that the Lavarata, the light-skinned stone-using immigrants of Taupota, departed finally in a north-western direction; it is quite possible accordingly that these light-skinned Lavarata reached Mukaua, and that the tradition of a south-eastern origin of certain Mukaua immigrants applies to these Lavarata immigrants. In these circumstances we must probably

1) HADDON 325-435 f, WILLIAMS 950-139 f, JENNESS and BALLANTYNE 416-198, PöCH 674-71. 2) 674-71, 675-139. 3) See: HADDON 317-112. 4) LISTON-BLYTH 500-467. 5) SELIGMAN 770-741.

assume that there were several movements of the stone-using immigrants: one group which penetrated from the D'Entrecasteaux Islands directly into the mainland, as in the case of the Ari, and another group which must have landed on the mainland further south, after which it migrated along the coast in a north-western direction.

A word should be said regarding the fact that the designs used to-day in the Massim District are the same as those of prehistoric times, so that the modern art is simply an outcome of the prehistoric with a few minor modifications. A similar conclusion is reached regarding the problem of coiled pottery, which we shall discuss at greater length later on. WILLITSCH¹⁾, who has drawn attention to the use of the spiral in ornamentation in the Admiralty Islands, the Sepik, East New Guinea, the Massim District and New Zealand, has attributed this type of decoration to a special migration of the Polynesians, who came to New Zealand after having passed through Melanesia; he attributes straight-lined decoration and concentric circles to the megalithic culture, with the distribution of which in Melanesia he is, however, not sufficiently acquainted. I do not intend to discuss this problem at greater length since this work is not concerned with the study of problems of style. It can, however, be maintained that WILLITSCH's Polynesian migration is nothing but the migration of our stone-using immigrants as will be even more obvious in the course of this study, and there is no reason to separate this migration from that of the megalithic culture. The few data quoted by us have actually shown the occurrence, side by side, of spirals and concentric circles upon megalithic stone-work, and it seems therefore probable that both these patterns belong to the culture of the stone-using immigrants. Spiral ornaments were also attributed by VROKLAGE²⁾ to the megalithic culture and it is remarkable that, basing himself on the distribution of this element, he has reached the same conclusions with regard to the migrations of the megalithic culture in Western New Guinea as we have done, but on the basis of entirely dissimilar arguments.

In Wanigela, a curved fragment of sandstone was found which, according to SELIGMAN and JOYCE³⁾, is probably part of a mortar.

Sacred Plants. We are only told that the people of the head of Collingwood Bay and the Maisin decorate the graves with croton and dracaena⁴⁾.

Mythological evidence. The few myths which are known⁵⁾, show nothing of those themes characteristic of the stone-using immigrants, and it is quite possible that this is due to the strong Papuan elements which have effaced the influence of more recent cultures.

Further Prehistoric objects. The following information will

1) 962 342 f. 2) 918 104 ff. 3) 777 331, quoted also by CHINNERY 151 272.
4) THOMSON 868 176, 870 39. 5) See: SELIGMAN 770 418, 641 Note 1, LISTON-BLYTH 500 467 f.

show that the prehistoric finds previously mentioned are not isolated cases. Two stone pestles of dark volcanic rock were found in the possession of the Cape Nelson natives, who regarded them as charms¹). A stone mortar was found on the Upper Musa River, lying alongside the track²). On the headwaters of the Musa River, BARTON met two men who had two potsherds hung around their necks as charms³). HADDON⁴) has pointed out that these fragments of pottery are "similar to the prehistoric pottery of Collingwood Bay, and each piece has a handle representing respectively the two main types of handles". We know too little at present of the culture of the Musa River tribes to be able to say whether these prehistoric potsherds are really due to the penetration into the interior of the stone-using immigrants, or whether they came here from the coast by trade. Records of the trading relations of the Musa River tribes do not exist⁵).

The Doriri, who live not far from the Upper Musa in the interior of Collingwood Bay, make raids to Mt. Victory and to many places on the coast of Collingwood Bay⁶), but otherwise very little is known about them.

One of their villages was surrounded by a moat, partly natural and partly artificial, ranging from 15 to 20 feet in width and about 10 feet in depth, and clean and well kept⁷). This is the only earth-work of this kind recorded so far from this region.

Suau: Before continuing our investigation on the north coast in a western direction, we shall deal with the most eastern part of the south coast, viz. South Cape or Suau which culturally forms part of the Massim District, and where the language is also Melanesian⁸). We have only very scanty information regarding the racial characteristics. PÖCH says⁹) the people are of Papuan type, and CHALMERS says only that they are much darker than the Eastern Polynesians¹⁰), a remark which conveys but little. Since, however, the adjacent area in the west, as far as Orangerie Bay, belongs to the Massim District by its culture, its Melanesian language, and its race comprising of many very light-skinned individuals¹¹), the same is certainly also true of the Suau region. Trading relations also, including the

1) BARTON 46 2 fig. 1, MONCKTON 557 37, CHINNERY 151 273. 2) 712 (1926/27) 49. 3) DE VIS (Nr. 6) 909 34 Pl. XII, CHINNERY 151 275. 4) 317 112. 5) SELIGMAN, 770 24 Note I, records that the adzes made of opihalcite stone which is found in the neighbourhood of the north-western slopes of Mt. Suckling, are traded down the Musa and Wakioki River to the coast. Here therefore is a common centre in relation with the Upper Musa as well as with the coast at Collingwood Bay. Since, however, nothing more is known about these trading relations, the question whether Collingwood Bay has had any influence on the Upper Musa must remain open. 6) MONCKTON 576 174-176, 211, 221 f., 228, 232, CHIGNELL 142 37, 64. 7) MONCKTON 576 222. 8) RAY in MACGREGOR 520 98 f., 700 18, 32. 9) 667 389. 10) CHALMERS 126 49, 128 45, CHALMERS and GILL 134 23, 135 48. 11) MACGILLIVRAY 519 286, CHALMERS 126 87 f., CHALMERS and GILL 134 58, D'ALBERTIS 15 1 197, 221 f., RAY 700 18, 702 397, SELIGMAN 770 24, 773 319, SAVILLE 765 25, 199.

Kula, exist with Tissot Island, Brumer Island, the China Strait, Teste Island, and the D'Entrecasteaux Islands¹⁾.

Stone circles such as those on the north-eastern coast are found here again. ROMILLY²⁾ records that in Suau there are stone floors in front of the houses, on which, it seems, the bodies of slain victims are laid and cut up before being eaten. This information is confirmed by HURST who says of Suau³⁾: "On the beach there is a mass of huge rocks on which the Suau people used to carve up their human victims in preparation for the cannibal feast".

On the other hand, LINDT records of Garihi village on South Cape⁴⁾: "Our guides took us to the centre of the village, where a space about ten feet in diameter was rudely flagged with stones from the beach. Round the outside of this pavement large flat stones were set on edge in the ground at an angle like the backs of chairs. We were invited to be seated, and the chiefs and headmen of the place were present to us". From this the double function of the stone circles as meeting places and their connection with cannibalism is evident.

With regard to South Cape, CHALMERS and GILL have given the following account about the disposal of the dead, which for us is of the utmost importance: All the members of a family are buried after death in one common grave, over which a little house is placed. The body is buried in the sitting position with the hands clasped round the knees. The head which is left free and protrudes from the earth is covered with an earthenware pot. After decomposition the skull is removed and kept in the house⁵⁾. This account is confirmed by ARMSTRONG who records⁶⁾: "The body was placed in the ground beneath the house in a sitting position, a cooking pot generally separating his head from the surface". Pictures of such graves published by LINDT⁷⁾ show stone heaps on these graves, but there is no mention of this in the text. It might further be added that crotons are planted near the graves⁸⁾.

Hence in this region, where the megalithic stone-work is similar to that of the north-east coast, we find recent burial in the sitting position with a pot on the skull in an ostensibly megalithic grave, a mode of burial which seems to be usual in the prehistoric graves of the north-east coast of New Guinea and other regions of Melanesia. I am of opinion that here we find preserved up to the present day a type of burial originally introduced by the stone-using immigrants, a method which, in the other regions of Melanesia, was customary in prehistoric times but which was abandoned later on. This is but another instance of the persistence of old customs in

1) MALINOWSKI 530 97 f, FINSCH 236 77, CHALMERS and GILL 135 48, HADDON 329 218. 2) 738 168, quoted also by FINSCH 238 11 17 f. 3) 401 16. 4) 498 78. 5) CHALMERS and GILL 135 333, 134 292, FINSCH 238 111 405 f. 6) 712 (1920/21) 41. 7) 498 Pl. XXXV and XXXVIII. 8) CHALMERS 126 58, 128 53, CHALMERS and GILL 134 31.

a somewhat modified form of which we found an example in the decorative designs and which, in regard to pottery we shall discuss later on. If this be true, it gives additional support to the view that in all the other analogous prehistoric graves about which we have only incomplete information, the dead have also been buried in the sitting position probably with pots on their heads; and at the same time it confirms the impression that the incompleteness of some of the skeletons found is due to the subsequent removal of some of the bones and particularly the skull.

Mythological evidence. We have already mentioned the pig-hero Taufo of the Suau-Daui District and his connection with the stone-using culture hero Tamudulele of the Massim District. Here too, as well as in Mailu, pigs are said to have been introduced by Taufo, and were unknown prior to his appearance. It was he who ordered the substitution of pigs for human victims¹).

From the Agaiambo region to the Orokaiva: On the north coast, further west even than Cape Nelson, the racial characteristics of the Agaiambo show that the non-Papuan element has not entirely disappeared. According to SELIGMAN they possess probably both Papuan and Melanesian blood²). The same is true of the Papuan speaking Orokaiva, who stand "midway between the typical Papuan and the typical Melanesian"; there are not only dark elements, but also lighter-skinned individuals among them, and there are concave, convex, and also straight noses³).

On the Upper Barigi River, which falls into Dyke Acland Bay west of the Agaiambo, stone bowls were found⁴).

There are a number of traditions relating to migrations of the Orokaiva. The legends for the most part point to the Waria and the Gira as the original home of the people. But the more recent memories of tribal feuds, dispersals and migrations would seem to indicate a movement from the opposite direction, i.e. from south to north. Thus, for instance, the accounts of the Aiga speak of a south-north migration⁵), and the Yega of the Buna District are even said to have come from near Cape Nelson⁶). According to WILLIAMS, certain food plants and tobacco have also spread in a south-north movement from the Biagi in the interior to the Binandele in the north⁷). On the other hand, there is a myth in the Buna District according to which the people came from the Mambare, and these people, who speak a Binandele dialect, have actually trading relations and social intercourse with the Gira and Mambare tribes⁸). MONCKTON records that the Binandele came "from over the sea ... and journeyed until they found

1) ARMSTRONG in 712 (1920/21) 42. 2) 770 33, 773 331. 3) WILLIAMS 944 9 f, 949 405, THURNWALD 885 12; regarding the languages see: WILLIAMS 949 406, MURRAY 596 34, 180, RAY 702 307, 403, HADDON 329 248, 712 (1921/22) 66, (1924/25) 42, 4) 712 (1927/28) 31. 5) WILLIAMS 944 8 f, 151-154, MURRAY 595 102; 712 (1914/15) 158-161 (1925/26) 50. 6) 712 (1920/21) 46. 7) WILLIAMS 943 118-121, 944 66, 8) AUSTEN 34 44, 58 f.

New Guinea" ¹⁾, but this information is not confirmed by any other author, as far as I can see. I think WILLIAMS is right in supposing that movements both southward and northward have taken place ²⁾. But it is difficult to decide whether any of these movements, and which of them, is connected with the stone-using immigrants traces of whom, though obvious, are not very numerous.

Prehistoric objects. There is no megalithic stone-work in the Orokaiva District, but Chinnery has seen numerous fragments of pottery ornamented with incised and impressed designs that were unearthed near Gona village, Holnicote Bay ³⁾, and HADDON ⁴⁾ affirms that they are doubtless of the same type as the Collingwood Bay fragments. In addition, stone mortars were found in the Orokaiva region ⁵⁾. On the Giriwa River, near Buna Bay a small stone image was found representing the upper portion of a man's body ⁶⁾. Another stone figure, the meaning of which is, however, not clear, and which Etheridge calls a "phallic animal figure", has been found near the headwaters of the Giriwa River ⁷⁾. Finsch has pointed out that from a short note published in *Annual Reports* 1895/96 p. 19, it follows "that on the Mambare River, earthenware imitations of stone clubs are still in use to-day" ⁸⁾ similar to those which had been found in Collingwood Bay. It might further be mentioned that a quartz club-head was unearthed in the Kumusi Division ⁹⁾. Finally, mention might be made of two other prehistoric finds which were discovered not far beyond the Orokaiva District. Above the present bed of the Aikora River which is a tributary of the Gira River, a stone pestle was found at a very considerable depth, the carved handle of which resembled the body of a bird; a stone mortar was also found ¹⁰⁾. Some of the writers who describe this find doubt that it was really a pestle. However this may be, we have come across birds carved in stone in San Christoval and the artificial island Olowotu of New Georgia, and have established their association with the stone-using immigrants. Since the stone bowls of the whole of Melanesia must be attributed to one and the same culture,—as must also the anthropomorphic stone images—the same must also apply to these stone-carved birds. The fact that the same *motif* reappears in many places so far distant from one another, is further proof of the cohesion and relatively homogenous character of the culture of the stone-using immigrants.

In the area of the Boli tribe, who live in the vicinity of the boundary of the Mandated Territory, but have also relations with the Binandele ¹¹⁾, a stone mortar and stone pestle were found ¹²⁾.

Sacred Plants. The Orokaiva use croton (*simbiri*) as one of their

1) MONCKTON 577 57 f. 2) WILLIAMS 944 8 f. 3) CHINNERY 151 275. 4) 317 112. 5) WILLIAMS 944 37, STRONG 851 98. 6) MEEK 543 176 f, MURRAY 595 373, 596 29, CHINNERY 151 274; 712 (1906/07) 56. 7) ETHERIDGE 233 26 f, Pl. VII fig. 1, 2, 3, CHINNERY 151 274. 8) FINSCH 236 260. 9) CHINNERY 151 276. 10) BARTON 46 1 f, Pl. A, MURRAY 595 373, 596 28, MONCKTON 577 22, CHINNERY 151 273. 11) 712 (1922/23) 26. 12) 712 (1922/23) 26.

clan emblems; croton was worn in the hair as a homicidal ornament, and croton leaves were also worn by dancers; among the ornamental plants, they use croton of many varieties, dracaena, and amaranthus "which have in some cases a magical as well as an ornamental value". "Ornamental trees are planted near the graves" ¹).

Mythological evidence. The characteristic ogre story is also known by the Orokaiva (Sub Buna District). A few of the details differ in this version. There once lived a man-monster called Dodoima or Totoima. He killed all the people, except a few that managed to escape into the bush. But one old woman (according to WILLIAMS this is his sister or wife) he did not kill, for he thought she would be useful to him. Once this woman when cutting a sugar-cane cut her finger. The dripping blood she collected in a leaf, cooked it and two boys originated from it ²). The old woman made spears for them, and showed them how to make a club and a canoe. With this they paddled to Dodoima and killed him. Then the old woman blew on her shell to let the refugees know that Dodoima was dead, whereupon they returned. Dodoima was cut to pieces, and a piece was given to everybody to eat. The old woman separated the people into groups and sent them out over the lands, even to the Gira River and as far south as Managalasi ³).

The creation of the sea by an old woman is related in the following story: The natives grow a variety of spinach called visingi, which when boiled has a slightly salty flavour. Once upon a time, when the sea did not yet exist, an old woman found that inside the visingi one could obtain water which, when boiled with the food, gave it a salty taste. She kept her discovery to herself, but one day when she was unable to go to her garden she sent her grandson for the visingi asking him to open it up a little to take out some of the water. But the boy pulled open the leaves too wide and the water of the visingi gushed out and flowed all over the place. With a stick the old woman managed to beat the waters back so that the sea was formed but the land remained dry ⁴).

A word must be added regarding the racial characteristics of the megalithic immigrants. It has been seen that the statement in the myths that light skin was one of the racial characteristics of the stone-using immigrants is confirmed by the fact that, in those regions where megaliths or other traces of the stone-using immigrants are found, there are actually light-skinned elements often with wavy or straight hair. The anthropological data quoted so far apply on the whole to coastal regions or to smaller islands where the climatic conditions do not greatly vary. This is not the case, however, in New Guinea where the climate varies according to the

1) WILLIAMS 943 116, 944 115, 119, 167, 193, 238, 949 411, 416; 712 (1918/19) 98, (1924/25) 48. 2) This theme of the cutting of a limb, and the origin of a human being from the blood, occurs in the following places of Melanesia: Maevo, CODRINGTON 160 406 f; Lesu, POWDERMAKER 678 274 f; Gazelle Peninsula, MEIER 546 15 f, 25, 205; Bola, KROLL 443 406 f. 3) AUSTEN 34 48-50, WILLIAMS 943 204, 944 155, 247. 4) AUSTEN 34 55-57.

altitude and distance from the coast, and where in consequence there is also a greater variety of fauna and flora. It is quite probable that these differences of environment have also in some way influenced the inhabitants of the country, although the natural laws by which these possible influences are governed are unknown. Thus, particularly, the light skin which occurs with numerous inland people of New Guinea has been attributed to the environment. It is obvious that this opinion can neither be proved nor refuted so long as we have no anthropological data at hand other than skin colour, for the stature, the character of the hair, the index of the head, nose and face, etc. must likewise be taken into consideration. But for the most part these data are lacking. The only means open to us is, accordingly, to investigate whether also in the interior of New Guinea the distribution of traces of the culture of the stone-using immigrants corresponds more or less to that of light skin. It must, however, be borne in mind that our knowledge of the cultures of the interior of New Guinea is still very scanty. I consider nevertheless that one of the most important results of this study is that it shows that the stone-using immigrants did in fact penetrate very deeply into the interior of New Guinea. It is a well known fact that quantities of stone mortars and stone pestles have been found in the interior of New Guinea, finds which we have shown to belong to the culture of the stone-using immigrants. Many further proofs will be forthcoming to testify to the presence of the stone-using immigrants in the interior of New Guinea. We may say in advance then that light skin in the interior of New Guinea may quite possibly be due to the influence of these immigrants, although we are unable to affirm that this is the exclusive cause. It is with this reserve that the data regarding the light skin of the inland people of New Guinea, will be quoted, data which we do not think could be justifiably omitted.

It has been reported that a stone-figure was found on the Upper Giritwa River which rises in the westerly part of the Hydrographer's Range. Our knowledge of the cultures of this region, situated beyond the Orokaiva District, is, however, very scanty, and we know of no other traces of the stone-using immigrants. Racially the inhabitants of the Hydrographer's Range differ very distinctly from the Orokaiva. Whereas the Diro, on the southern limit of the Orokaiva District, who belong to the Orokaiva, have a dark-brown skin¹), the inhabitants of the Kumusi watershed, of the Mamama River (a tributary of the Kumusi), the Managalasi and the other inhabitants of the Hydrographer's Range are light-skinned, and "some are very fair-skinned, almost white"²). CHINNERY³) has actually considered this as "a race mixture for which the traditions of the people offer no explanation".

Before continuing in a north-westerly direction along the coast, we shall

1) C. T. WURTH in 712 (1922/23) 24. 2) CHIGNELL 142 327, WILLIAMS 944 4 f, CHINNERY 150 75, 154 444; 712 (1920/21) 46, (1921/22) 72. 3) 154 444.

study first the south coast of Papua which lies opposite that part already investigated, in order to discover how far the stone-using immigrants penetrated into the interior of the country.

Mailu: The Mailu speaking people, the neighbours of the Massim people of Suau-Daui District, are the most easterly of the western Papuo-Melanesians. Their area extends from Cape Rodney in the west to Gadaisu village in Orangerie Bay in the east, and the limits of their linguistic area in the interior are Mt. Suckling, Mt. Dayman, and Mt. Simpson ¹). Their skin varies from light to dark brown and frizzy as well as curly hair is also found ²). Their language is Papuan with many borrowed Melanesian words ³). Although in social organization and material culture they resemble their western neighbours, there is nevertheless abundant evidence of Massim influence in material culture, art and some beliefs ⁴). The overland trade routes leading from Mullin's Harbour to Milne Bay, Bartle Bay and Goodenough Bay have already been mentioned. Besides this, the Mailu have trading relations with the inland tribe Dimuga, which itself trades with the north coast round Cape Vogel. In this manner the Mailu are brought into culture contact with the Northern Massim. Through intensive trading relations with Suau, Mailu is in contact with the Southern Massim District, and by trade with Aroma, it has relations with the whole of the western part of the south coast; thus, axe blades of Murua have reached territories as far as the Fly River through Mailu and some other more western tribes so that Mailu actually links the east end of New Guinea with the coastal tribes of the west ⁵).

No megalithic stone-work is known in Mailu, but at one of the preliminary feasts of the Maduna, a heap of stones is erected by the clan giving the feast in front of the house of the master of the feast. This is a sign that the feast is to be held ⁶). We shall show later on that the Maduna, which is identical with the Soi feast of the Massim District, forms part of the culture of the stone-using immigrants.

Sacred Plants. At the head and foot of graves crotons are planted; when the betel nut is deteriorating in condition they try to improve it by tying some croton to the stem; at dances and feasts they decorate themselves with croton, and their gardens also are decorated with "gaily coloured or flowering shrubs" ⁷).

Prehistoric objects. In Amazon Bay, in the interior behind Woworo, bits of prehistoric pottery were found, bearing patterns different

1) SAVILLE 765 18, 20. 2) SAVILLE 765 25-28, SELIGMAN 773 319, MALINOWSKI 526 538, MURRAY 595 146, HADDON 323 247. 3) RAY 700 20, 702 397, 403, SELIGMAN 770 24 f, 773 319, HADDON 323 11. 4) SAVILLE 765 18, SELIGMAN 773 319, HADDON 323 11, 247, MALINOWSKI 526 499 f, 507. 5) MALINOWSKI 526 506 f, 541, 548, 555 f, 589, 594, 524 2, SAVILLE 765 27 f, 120, 151-153, 239, 303 f, 309, SELIGMAN 770 25, 540; 712 (1920/21) 54 etc. etc. 6) MALINOWSKI 526 494, 669. 7) SAVILLE 765 126, 174, 237, 263, MALINOWSKI 526 586.

from those found on the present-day Mailu pots. Although the impressed marking of the sherds differ from those of the Collingwood Bay sherds, HADDON¹⁾ assures us that "it is evident that they have the same general character"²⁾.

Mythological evidence. Tamudulele, the stone-using culture hero of the Massim District, the Taufu of the Suau-Daui District, is also known by the Mailu. SAVILLE gives the following record of him³⁾: The hero of ancient legend who initiated the intensive trading and travelling of the tribe, and who first introduced domestic pigs, coconuts and sago, was called Tau or Samudulele. The former name is the more interesting, according to SAVILLE's opinion, since "the name Tau is part of the title of the tribal hero Tauhou and Taufou, found among the Southern Massim, while Taurama... was the Motuan legendary hero, who started the hiri, the big annual trip to the west of the Motuans". The Mailu hero Tau or Samudulele, came from the west, the Aroma village Ubuau or Oilavanua, to the east. With his mother he came by a small canoe and poled to Domara, and then to Abau. Here Tau's buttock marks where he sat, and his finger marks are visible on the stone. Then they poled to Table Point, Amazon Bay, Gadaisu, Manuabada and Maraia. Here one pig ran off into the bush (he was carrying pigs on the canoe). One big sow was tied up on the canoe. This sow bore a lot of little pigs which were put into a piece of bamboo and shut up there. Then they came to the village Veriveri, the men of which were engaged in a cannibal feast. Tau gave them pigs, telling the men to eat pigs and let the cannibal victims go. At the next place, Ieru, his mother, died, so he went to Diliulele where he remained. Tau dropped pigs and planted coconuts and sago at all places along the coast, except at those where they refused to give him fire when he asked for it. "There were no domesticated pigs before Tau's time, except at Aroma, whence he came. And that explains", said the native informant, "why Mailu people have always gone to Aroma to buy their pigs". Here, again, we find all the characteristic features of the stone-using immigrants, to whom are ascribed the introduction of the coconut and other food plants, the introduction of the pig, and the leaving of bodily prints in the stone. The attributing of trade and travelling to this culture hero can be compared with the story of Gere'u of the Trobriand Islands who has been credited with the introduction of the Kula. We have considered Gere'u as a representative of the stone-using immigrants, and from this it would follow that the Kula trade, as well as the extensive trading expeditions on the south coast of New Guinea which affect even the Fly River, were started by the stone-using immigrants. This is not at all surprising if it is borne in mind that the stone-using immigrants are in fact the sea-faring people par excellence of the whole of Melanesia, a characteristic feature, lacking which neither their extensive

1) 317 111, 113. 2) SAVILLE 765 21. 3) 765 165-167, ARMSTRONG in 712 (1920) 1921) 42.

migrations in the whole Pacific ocean, nor these long trading expeditions could be explained. Further arguments will be adduced in favour of this opinion as this work proceeds.

A few words must be said regarding the information that Samudulele came from the west. The view is generally held that the Melanesian immigrants who, on the south coast of New Guinea by mixing with the Papuans, constituted the Papuo-Melanesians, came from the east. This fact, and the resemblance of Samudulele with Tamudulele of the Massim District, might have led one to suppose that the stone-using immigrants came from the east. But it must be emphasized that the stone-using immigrants can by no means be identified with the Melanesians, although they are also Austronesians. Not until our investigation is more advanced can the way followed by the stone-using immigrants definitely be determined.

There is a legend concerning the origin of Mailu Island, in which it is stated that when some of the ancestors of the people lived near Aroma, they came east to fish; one man threw his fish-spear from the canoe at a great fish. Alone, however, he was not strong enough to pull up the spear. All on the canoe came to help him, and they pulled and pulled till up from the sea-bottom they pulled Mailu Island¹). This theme of the fishing up of the island has been found to be characteristic of the stone-using immigrants. It is important to note that the people who fished up the island were some of their ancestors who came from Aroma. Now, as far as I can see, no other group of ancestors who came from Aroma is mentioned in the sources of information with the exception of Samudulele, so that, according to the myths, it is most logical to conclude that Samudulele and the people who fished up the island belong to the same group of immigrants. This is actually in complete agreement with our view that both are representatives of the stone-using immigrants, who must accordingly have immigrated to Mailu from the west.

Aroma, Kerepunu, Hood Bay and Hula: The neighbours of the Mailu—the Aroma, Kerepunu, Hood Bay people and the Hula who speak Melanesian languages—have frequently light skin, wavy hair and even oblique eyes²). They have trading relations with the Mailu as well as with the Motu as far as Redscar Bay³). But there are, as far as I know, no traces of the culture of the stone-using immigrants amongst them. The same is true of the Melanesian speaking Sinaugolo and the Papuan speaking Garia, who, racially, are a mixture of Papuan and Melanesian elements and who also have wavy hair⁴).

1) SAVILLE 765 198. 2) RAY 700 18, 702 397, 703 66, 68, HADDON 325 438, FINSCH 238 1 465, 239 48 f, SELIGMAN 770 16, 773 252, 318, 322, SAVILLE 765 27, ZÖLLER 989 425, MACGREGOR 520 98, STONE 845 191, PÜCH 667 390, 673 491, CHALMERS 126 39, 128 38, CHALMERS and GILF. 134 15, 250, etc. etc. 3) FINSCH 235 14-17, KRIEGER 441 340, 346 f, SELIGMAN 770 93, HADDON 317 113, MACGREGOR 520 72, CHALMERS 126 40, 128 143 f etc. etc. 4) RAY 700 18, 703 81, SELIGMAN 770 3, 17, 30, 773 254, 326 f, HADDON 325 286, 438.

In the Aroma-village of Maupa, FINSCH discovered certain house-gable decorations vaguely resembling a horse's head ¹). VROKLAGE has rashly interpreted these decorations as cow-heads, and believes that they correspond to the typical megalithic house decorations of Indonesia ²). To accept such an explanation, it would be necessary to show first that many other influences of the megalithic culture actually exist, particularly since there is no other place in Melanesia where these gable decorations are found. But since no proof of any such influence exists precisely in this region, VROKLAGE's interpretation is therefore unacceptable. Another of VROKLAGE's theories is that the open "dubus", which are found on the coast from Aroma as far as Redscar Bay, and further inland with the Sinaugolo, Garia, Koita, etc. and which originated probably in the Sinaugolo District ³) form part of the megalithic culture. He bases this opinion upon the fact that the "dubu" fulfills the same function as the megalithic meeting place, and he suggests that the decorations of the posts of some of the "dubus" are "imitations of buffalo horns" and are strongly reminiscent of the megalithic culture of Indonesia ⁴). A writer in an Australian journal assures us that they represent "crab's claws and are sacred" ⁵). I wonder why no writer has so far taken these carvings as symbols of the moon and as proof of a cult of the heavenly bodies. All these explanations are equally arbitrary and unscientific. The data already quoted, and to be quoted later as this work proceeds, make it clear that some influence of the stone-using immigrants at this point of New Guinea is possible; but in most of its functions the "dubu" corresponds to the general Melanesian club house; its form is locally very limited, and occurs in no other part of Melanesia which has been influenced by the megalithic culture. Therefore this opinion of VROKLAGE's cannot be accepted either.

Motu: Besides somewhat darker elements with frizzy hair, there are many of the Melanesian speaking Motu with very light skin, straight or wavy hair and oblique eyes, a fact which has been remarked upon by many writers ⁶). We are faced with a similar problem with regard to the direction from which the Motu, or more particularly the elements belonging to the stone-using immigrants, originally came, as in the case of the Mailu. The myths which speak of a common origin of the Motu, Koitapu, and Koiari, which "by no means adequately accounts for the ethnological relationship of the Motu" ⁷) relate that some of these people, the later Motu, went to Elema. After a quarrel that took place in Elema between two brothers, one of them migrated to Taurama (Pyramid Point) and later to Port Moresby ⁸). CHALMERS and KRIEGER, on the strength of these myths,

1) FINSCH 237 10, fig. 11. 2) VROKLAGE 917 107. 3) SELIGMAN 770 18-20, 22, 56 f., 60-65, 153, HADDON 323 10, 246, 325 424 f., FINSCH 237 13 f., CHALMERS 127 Pl. p. 147, Pl. VIII, CHALMERS and GILL 134 100, 242 f. 4) VROKLAGE 917 106 f. 5) 712 (1932 33) 28 from *Australian Stamp Journal*, January 12, 1933. 6) LAWES 465 606, 466 371, 373, BROWN 103 469 f., STONE 845 75, 77, PÖCH 667 389, MOYNE 588 67, SELIGMAN 770 16 Note 3, PRATT 682 292, 295, etc. etc. 7) HADDON 323 163. 8) KRIEGER 441 310, 329, SELIGMAN 770 43, MURRAY 595 153 f., LINDT 418 112, 118, CHALMERS 127 173, 131 57, CHALMERS and GILL 134 124 f.

have expressed the opinion that the Motu immigrated to their present home from the west¹), an opinion which has, however, been rejected by almost all other students, who declare that the Motu immigrated from the east²). The mention of Elema in the myths is explained by HADDON who says³): "It is possible that they formerly settled further up the coast and entered into trading relations with the Gulf Papuans before colonizing Port Moresby." But although it may be taken for granted that the Melanesian Motu came to their present home from the east, this does not tell us anything whatever regarding the direction from which the stone-using immigrants have come, if it can be shown that they actually existed there. It is well known how intensive the trading relations are with the Papuan Gulf, and there are certainly few events which have been described so frequently as the hiri voyages of the lakatois from Port Moresby to Elema. There are furthermore trading relations with the Koita and Koiari, and with Hood Bay, Kerepunu and Hula in the east⁴).

Prehistoric objects. No megalithic stone-work has been found, but on the now uninhabited island Dauko, about four miles from Port Moresby, prehistoric potsherds were found, differing completely in their ornamentation from the present Motu pottery; they seem, however, also to differ from the other prehistoric potsherds of New Guinea⁵). Unfortunately, nothing is recorded regarding the method by which these potsherds have been made.

Sacred Plants. Apart from the information that croton (taraka) is worn in the lobe of the ear and in the armlets as ornament⁶), I know of no ritual use of this or other plants.

Mythological evidence. We have seen that SAVILLE has compared and apparently identified the stone-using culture hero Samudulele or Tau of Mailu with the Motuan hero Taurama. Now, CHALMERS records the following story of Taurama and his brother: Long ago Keaura and Taurama (Taurama is the promontory of Pyramid Point, eight miles east of Port Moresby) lived together. They were both males, and had wives. One night Keaura committed adultery with Taurama's wife; it was discovered, and there was a terrible quarrel. Taurama took his long wooden sword and striking hard he rent the two hills asunder. Then using his sword as a lever, he heaved up Keaura and sent him flying to the west (i.e. Aird Hill in the Gulf District). But Keaura did not leave empty-handed, he carried with him coconuts, sago, betel nut, betel pepper, taitu (sweet yam), and yam; leaving for Taurama armshells, beads, wild yams, and

1) CHALMERS 127 13 f, KRIEGER 441 286, 326, MURRAY 595 288, LINDT 498 118.
2) HADDON 329 162, 268, PÖCH 669 9, 673 491, RAY in MACGREGOR 520 99 f, FRIEDERICI 269 16 ff, etc. 3) 329 162 Note. 4) WILLIAMS 948 125, LAWES 466 370, CHALMERS 127 48, 128 34, KRIEGER 441 343-345, FINSCH 236 257, 238 II 332, 237 12, STONE 845 140, SELIGMAN 770 17, PRATT 682 68 ff, etc. etc. 5) SELIGMAN and JOYCE 777 335, Pl. XIII, fig. 5, p. 336, CHINNERY 151 275, SCHURIG 841 31. 6) STONE 845 77, 201, 239, 249, FINSCH 238 II 307, CHALMERS 127 83 f.

bananas. Keaura, when travelling west, left some of these plants at Kabadi, Nara, Roro, Maiva, Kevori, Oiabu, Motumotu, Moviaivi, Karama, and at Silo and Uamai. To the west of Silo he settled down, and scattered to the west of him an abundance of all good things. Then turning to Taurama he called out: "And what now have you got to eat, Taurama?... Will arm-shells be sufficient for you?... Come now, bring your arm-shells, and other things to me, and get my coconuts, my sago, and my betel nuts". From that day to this, trading has been continued. Taurama was the first born, Keaura was the second¹).

Taurama appears here as a physiographical shaper, but the characteristic features of the culture heroes are more apparent in Keaura, and it is actually he who has the greater resemblance to Tau of Mailu. The story of adultery is certainly reminiscent of that frequently found associated with the antagonistic brothers of the stone-using immigrants; Keaura introduced food plants, as did also the other culture heroes of the stone-using immigrants; his starting of the hiri voyages equates him with Samudulele of Mailu who also originated trade and travelling, and with Gere'u of the Trobriands, the creator of the Kula. This again confirms the view that these trading expeditions in Melanesia were instituted by the stone-using immigrants.

Again some difficulties arise in determining the directions in which the migrations took place. It has been seen that, according to one version, the quarrel of two brothers took place in Elema, after which one of them migrated to Taurama, so that the starting point of this easterly migration must have been in Elema, a fact which induced some writers to declare that the home of the Motu was in the west. We are not told expressly that these two brothers are identical with Taurama and Keaura of our present myth, although this is highly probable. If they are, there would seem to be some contradiction, since in the Taurama-Keaura version the starting point of the migration is said to be in Taurama, from where the migration proceeded to the west, whereas in the first myth the very opposite occurs. It is therefore somewhat difficult to draw from these myths any definite conclusion regarding the direction in which the migrations took place. It is, however, of interest to note that both these myths link the two points Motu and Elema with one another. It might be considered as an argument in favour of a west-easterly migration of the stone-using immigrants of Motu that the culture hero Tau, or Samudulele of Mailu, and those who fished up Mailu Island, came to Mailu from the west. It will, however, be clear that there are good reasons to suppose that the stone-using immigrants, who reached the coast near the Motu District, came originally from the interior of the country after having crossed the whole of New Guinea. The

¹) It must, however, be mentioned that, according to another myth a man, Edai Siabo, was the originator of the hiri. SEIDGMAN 770 97-100. MURRAY 595 156 f. LINDT 498 120-124; 712 (1922/23) 39 f. CHALMERS 127 16-19, 22-24, 33 f.

migrations of the two antagonistic brothers would, for these reasons, be but secondary movements, revealing nothing of the direction from which the stone-using immigrants originally came. We shall revert to this question again later.

The usual ogre story occurs again with the Motu. According to this story a giant ogre who inhabited Mt. Owen Stanley devoured the people and had devastated nearly the whole of the coastal district. So the people fled, but one woman did not escape. She was about to have a child, and all her entreaties to be taken in one of the canoes were in vain, since the men feared she would sink the canoe. So this woman hid herself in a cave. A son was born who, when grown up, killed the giant ogre. Then all the people returned and all the most beautiful girls in the tribe became his wives ¹).

Koita: The Papuan speaking Koita have intermarried with the Motu, and for generations the two people have lived together; the Koita have adopted many of the Motuan customs, even the hiri voyages to the Gulf ²). Racially, also they show some Melanesian influences and, like the Motu, they have oblique eyes, and their dolichocephalic skull index has been raised by intermarriage with the Motu ³).

They have a story of a man who, returning from his garden, saw a stone "with an oval depression in it, resembling one of the wooden food bowls" ⁴), a description which makes it probable that this was a stone mortar.

Koiari: It is extremely interesting to note so far in the interior that the inland people and neighbours of the Koita, the Koiari, who also speak a Papuan language ⁵), show very clear evidence of a mixture of races; for, besides short, dark-skinned and frizzy haired elements, there are many tall people with light and even very light skin "as light coloured as Eastern Polynesians", with oblique eyes "like those of Siamese", and with wavy hair ⁶). SELIGMAN and WILLIAMS ⁷) are of opinion that this is due to a mixture with the Melanesian race. Trading relations reach as far as the coast, where the people fetch the water from the sea ⁸).

In one of the villages, STONE saw graves; he gives the following

1) ROMILLY 738 120-127. 2) RAY 700 19, MURRAY 595 152, 154, MACGREGOR 520 98, MALINOWSKI 526 498, SELIGMAN 770 16, 44, 96-100, 109, 111, 773 254, 316, WILLIAMSON 958 91, HADDON 325 437, 319 35, LAWES 466 372 f, etc. etc. 3) HADDON 325 290, LAWES 466 372, MALINOWSKI 526 498, SELIGMAN 770 16 Note 3, 373 332. 4) SELIGMAN 770 157. 5) MURRAY 595 152, 596 34, 80, RAY 700 19, 702 403, LAWES 466 375, HADDON 325 437, etc. etc. 6) CHALMERS 126 96, 98, 105, 108, CHALMERS and GILL 134 65, 73, LAWES 466 374, STONE 845 164 f, SELIGMAN 770 16, 773 332, HADDON 325 290 f, v. d. BROEK 95, 265, FINSCH 239 51, 712 (1892) 27. 7) SELIGMAN 770 29 f, WILLIAMS 951 52. 8) CHALMERS 126 143, CHALMERS and GILL 134 105, FINSCH 238 f 306, 313, 235 23, LAWES 466 376, STONE 845 122 f, 174.

description of one of these graves¹): "A circle of stones, about thirty inches across, was on the ground, and supported by these stones, a number of sticks about four feet long were placed nearly upright, meeting and leaning on one another at the top. A grass girdle (as the deceased was in this case a woman) was fastened round the sticks as represented in the drawing, and over it was placed probably her only other possession—an earthenware bowl".

It is certain that not every use of stone is megalithic, and in the present case it is even more difficult to pronounce judgment, since as far as I know, this is quite an isolated type of grave. It should, however, be remarked that this grave shows remarkable resemblance to the graves of the Sulka. There, it will be remembered, "a small tower-like structure covered with banana leaves is placed over the head (of the body buried in a sitting position). Stones are laid round the little tower"; and it has been seen that with the Sulka this type of grave was probably due to the influence of the stone-using immigrants.

Sacred Plants. I can find no mention of the ritual use of any plants. Croton leaves (*romaka*) are only worn in the armlet or the hair²).

Prehistoric objects. A stone mortar was found in the Koiari District³).



Fig. 21. Koiari grave (After STONE 845 118).

Other inland tribes: The neighbours of the Koiari, the inhabitants of the Astrolabe Mountains, the Favele, Sogeri, Meroka, and Kupele all speak Papuan languages⁴), and have all more or less intensive relations with the Koiari. They have also this in common with one another and with the Koiari that, besides very dark skin there are many cases of light and very light people, and besides frizzy hair, curly, wavy, and even straight hair is found⁵). With regard to the Sogeri, WILLIAMS⁶) is of the opinion that: "Altogether there is no doubt that we have here a mixed population, in which the immigrant Melanesian strain represents a strong factor". Trading relations seem to exist even with the coast⁷).

At Wagava, in the Sogeri District, WILLIAMS made excavations about which he gives the following description⁸): "At Wagava a promising cleft at one side of the sloping rock platform was cleaned out to a depth of about 18 inches and yielded a number of charred human bones". Then WILLIAMS continues by saying: "At Wagava a few fragments of pottery

1) 845 117 f, fig. p. 118. 2) STONE 845 167, 249. 3) STRONG in 712 (1921/22) 25.
4) RAY 700 19, 703 81, HADDON 325 437. 5) CHALMERS 126 38, 128 f, 145, 128 36,
CHALMERS and GILL 134 14, 93, HENNESSY 355 110 f. 6) 950 139. 7) KRIEGER
441 343, CHALMERS 127 148. 8) 950 137 f.

were also found. (The modern inhabitants do not actually make pottery, but constantly use pots from the Motuans). The other interesting find was a small broken celt with squared edges, giving an oblong section, unlike the elliptical section which belonged to the stone axes of this region... A trench along the foot of the wall reached bed-rock at 9 inches, and revealed a few more fragments of pottery". Unfortunately, WILLIAMS does not give a more detailed description of the potsherds found. The importance of the celt with squared edges will be discussed later on. It does not follow clearly, however, from WILLIAM's text whether the previously mentioned potsherds were found in the cleft where the human bones were found, or somewhere else. It would be of great interest to clear up this point.

There is another problem which I shall discuss at greater length later on. At Bomana, some 11 miles from Port Moresby, rock paintings were found. Some 20 miles further inland from there, at Nahatana in the Sogeri District, as well as at Lohomunidabu, east of the Sogeri, other petroglyphs were found¹⁾. With regard to these latter petroglyphs, WILLIAMS says that they "reveal a certain similarity to those of Boianai (i.e. the incisions on the megaliths). But since we have not yet discovered any connecting links in the wide intervening space it would perhaps be premature to assume that we have at Lohomunidabu the western limit of the Boianai-D'Entrecasteaux stone culture". But elsewhere²⁾ WILLIAMS says with regard to the Sogeri: "Tradition points to a migration from the east into the Sogeri District, viz. from the direction of Yovi and Seramina (on the Wanigela River) and there is little doubt that there has been such a movement"; but unfortunately, he gives no details of this tradition.

To these data it may be added that the Kagi, who live south of Mt. Bellamy, i.e. even nearer to the Owen Stanley Range than the other tribes mentioned, are tall, light-skinned, and have narrow, high noses. "Their appearance shows that in spite of coming from the heart of British New Guinea and speaking a Papuan language, they possess more Melanesian than Papuan blood", says SELIGMAN³⁾. It is much to be regretted that we know hardly anything of the middle and eastern part of the Owen Stanley Range, or about the area east and north-east of it; until therefore this lacuna is filled, it cannot be definitely maintained that relations with the north-eastern coast of British New Guinea exist. This question will be referred to again later.

We shall now continue our investigation on the coast west of Motu.

West of Motu as far as Roro and Mekeo: The western neighbours of the Motu, the Manumanu (Galley Reach), Kabadi, Doura, Nara, Roro, and Mekeo, as far as Cape Possession which, as is well known, represents a

1) STRONG 851 97, in 712 (1921/22) 24 f, WILLIAMS 950 130 f. 2) 951 57.
3) 773 326, see also: Pösch 669 9, 667 390, 673 20, RAY 703 81.

cultural border line, all speak Melanesian languages containing more or less Papuan elements ¹).

Very light skin is found among the Manumanu besides darker elements; there are also light-skinned elements among the Nara, Roro and Mekeo, and sometimes they have crisp hair, very often also curly, wavy or even straight hair, oblique eyes, high cheek bones, and aquiline as well as straight noses ²). Trading relations exist between the Roro, Elema, Mekeo, Nara, and extend further to the south ³).

With regard to stone-work, I am only aware of a Nara tradition in which it is said of a certain chief: "The chief... took a seat on a big stone in the middle of the village... This stone is generally used by the chief when he wants to speak to general public" ⁴). This information is, however, very indefinite.

Sacred Plants. The Roro use certain sacred plants on the following occasions: For the lifting of the mourning period the village is swept with branches of croton (*irouba-irouba*); if one village contracts a debt with another, a croton is planted near the club house as a reminder; in wallaby-hunting magic the magician spits chewed areca nut on a *dracaena* (*topi*) with which he strikes the nets; in war magic the magician brandishes a *dracaena spec. (ofe)* in the direction of the enemy, and then he also strikes the spears of his own party with this *dracaena*; the *dracaena (topi)* is also used in war magic; to stop a fight, the chief has to get between the combatants and to wave a *dracaena* ⁵). In Maiva, somewhat further in the west where the language spoken is Melanesian, although the culture is strongly influenced by the Elema ⁶), croton (*taraka*) and *cordyline* are planted between the houses ⁷). The Mekeo use *dracaena* as ornaments, and croton hedges mark the boundaries between their gardens ⁸).

Prehistoric objects. In Vaipa, in the Mekeo District, a stone mortar was found, and a stone pestle was also found in Mekeo ⁹).

Mythological evidence. Unfortunately, very little information is recorded on this subject. The myth of Oa Rove of the Roro shows certain features of the culture heroes, such as for instance, the introduction of weapons, the creation of Mt. Yule, etc. He caused the women of a village to rise to a great height and then let them fall down whereupon they

1) RAY 700 18, 703 65 f, MURRAY 595 159 f, SELIGMAN 770 26 f, 31 f, 773 321, 329, WILLIAMSON 957 290, 351, BARTON 45 263, HADDON 325 438 f, MACGREGOR 520 98, etc.
2) GILL 286 249 f, MORESBY 579 139, 580 176 f, SELIGMAN 770 26 f, 773 252, 321 f, SELIGMAN and STRONG 778 232, WILLIAMSON 958 263, GUIE 316 88, D'ALBERTIS 15 244, 260, 262, 331 f, 411 f, 16 278, STONE 845 24 f, 186, HADDON 329 147, CHALMERS 127 12, LINDT 498 128 f, EDELFELT 212 97, THOMSON 868 81. 3) GUIE 316 8, D'ALBERTIS 15 383, STONE 845 29, SELIGMAN 770 204 f, 215, STRONG 853 274, HADDON 325 275, MURRAY 595 162, etc. 4) OBI 621 421. 5) SELIGMAN 770 216, 292 f, 297, 346, GUIE 316 136, 145. 6) MACGREGOR 520 98, RAY 700 18, 95, HADDON 329 141 f, SELIGMAN 770 26, 773 320, etc. etc. 7) STONE 845 249, CHALMERS and GILL 134 234, 135 135. 8) WILLIAMSON 958 122, MEEK 543 139. 9) CHINNERY 151 272 f, DE VIS 909 (Nr. 6) 32-34, Pl. XIV.

became rocks, hills and mountains. This he did to revenge himself on the men, who had treated him badly ¹). It is, however, uncertain whether this character can be considered as a culture hero in the same way as the other culture heroes mentioned.

Kuni: We shall now deal with the inland tribes of this area. The Kuni, who speak a Melanesian language ²) are, however, racially more closely connected with the Mafulu of the interior. The Papuan element with dark skin and frizzy hair prevails, though there are also short people. There are also a few cases of oblique eyes ³). No other Melanesian speaking tribe is found so far inland as the Kuni, whose area extends from Lapeka to the immediate neighbourhood of the Mafulu ⁴). By their relations with the Mekeo on the one hand, and the Mafulu on the other, they became the connecting link between the mountains and the coast ⁵).

Mythological evidence. The usual story of a monster occurs here again. It is said that man-eating pigs ate the people, so that they fled to the coast. One man made a pit for his wife who was left behind, in which she gives birth to a boy, who kills all the pigs. Thereupon the refugees return ⁶).

Mafulu: The number of short people in this tribe is even greater than among the Kuni, and they are found side by side with typical Papuan elements having dark skin and frizzy hair. But here, too, more recent influences are still to be found in the race, so that WILLIAMSON maintains the existence of an aboriginal stratum of Negritos, which has been overlaid by a Papuan and then by a Melanesian population ⁷). The cultural uniformity of this area is particularly manifest from the fact that the Papuan Fuyuge language, which is also spoken by the Mafulu, is spoken as far south as Korona, and to the east as far as the Vanapa River, Wharton Range, the Kambisi villages and Gagara. The Kambisi villages are also culturally closely connected with the Mafulu ⁸). There is direct connection with the coast by trade with Mekeo and Kabadì, and indirect connection with the coast is established by trade with the Kuni ⁹). More interesting, and of greater importance for us, are the trading relations with the coast of the Mandated Territory; in Iduna village, inland of Hall Sound, CHALMERS was assured by the natives

1) SELIGMAN 770 304-309, ROMILLY 738 143-155, CHALMERS and GILL 134 136.
 2) RAY 703 66, EGIDI 219 981, SELIGMAN 770 31, 773 328, WILLIAMSON 957 290, 351, 958 208, etc. 3) WILLIAMSON 957 21, 290 f, 295 f, 958 178, 960 77 f, SELIGMAN and STRONG 778 234, MURRAY 595 164 f. 4) STRONG 849 306, SELIGMAN 770 31 f, 773 328 f, WILLIAMSON 958 195, 200. 5) WILLIAMSON 957 295, 758 166, 180, 291, SELIGMAN 770 31, 314, 773 329, SELIGMAN and STRONG 778 233, etc. 6) EGIDI 219 992-994.
 7) STRONG 853 274, WILLIAMSON 957 21, 23, 210, 27 ff, 304 ff, LISTON-BLYTH in 712 (1922/23) 19. 8) WILLIAMSON 957 2, 8-10, 236-239, 958 208, HADDON 323 14, MURRAY 595 51, 103, 164 f, RAY 703 69, 80, etc. 9) WILLIAMSON 957 51, 53, 76, 184 f, 204, 211 f, EGIDI 219 (1914) 91, 96 f, PRATT 882 254, 257.

that certain shells for decoration purposes came from the coast of former German New Guinea; similar information was also given by the Mafulu, the Kambisi¹), and the people of the western Owen Stanley Range; in Lalamait village in the Pole Range, which is still nearer to the former German Boundary, and whose inhabitants had never seen white men, brass belts „made in Germany” were found²). We are faced here with the very interesting case in which trading relations cross the whole of New Guinea from one coast to the other. If it is true that trading relations apart from being an agent in the diffusion of cultural traits are also indications of former migrations of cultures, the present case would seem to be particularly suggestive.

We have numerous proofs showing that the Mafulu have been influenced by the stone-using immigrants.

If the platform upon which the body of a chief is exposed breaks down, the bones are buried beneath the remains of the platform. Upon this grave they “put a heap of stones, and on these put the wooden remains of the collapsed platform, planting round them tobacco or croton, or some other fine-leaved plant”³).

Of particular importance is the so-called “big feast” of the Mafulu, a mortuary feast in which trees are ceremonially erected in the centre of the village. The resemblance of this feast with the megalithic Walaga feast of Bartle Bay, the “maduna” feast of Mailu, the “Soi” feasts of the Massim District, etc. will be discussed later, and it will be shown that these feasts form part of the culture of the stone-using immigrants.

The approach to Foula village south of the Mafulu was through an avenue of beautiful crotons planted by the natives⁴). This is strongly reminiscent of the avenues of the stone-using immigrants mentioned previously.

Sacred Plants. When planting yam, they wrap round it a croton leaf which they call the “sweetheart of the yam”. Then they plant the yam with its sweetheart leaf around it; during the construction of a men’s house, croton leaves are tied to the poles. On the top of the posts which are set up for the “big feast”, food, skulls, and croton leaves are hung; and croton leaves are also tied to those fruits destined for the chiefs; a bunch of croton leaves is sent as a symbol of an invitation to a feast; the period of the seclusion of boys during which the septum of the nose is perforated, is brought to an end by putting a croton branch into the hole⁵).

Prehistoric objects. In the Mafulu region a stone mortar was found by WILLIAMSON, and he was told “that similar things are from

1) The Kambisi have also relations with the north-westerly Gailala. 712 (1920/21) 50. 2) CHALMERS and GILL 134 136, WILLIAMSON 957 8 f, HADDON 323 14, HUMPHRIES 399 276, GREFFATH 306 253; 712 (1920/21) 128. 3) WILLIAMSON 957 258.

4) PRATT 682 239 f. 5) WILLIAMSON 957 39, 131-134, 136, 167, 288, 958 233, 246 f, 262, EGIDI 219 (1914) 91.

time to time found in the district" ¹⁾ and also *Annual Reports* ²⁾ mentions mortars found "between Mt. Yule and Mafulu".

Mythological evidence. There is a general belief in a mysterious individual named Tsidibe, who has immense power, and who once passed through their country in a direction from east to west. They believe that it was Tsidibe who taught them all their customs, including dancing and manufacture, hunting and agriculture. On leaving, he promised that he would return again, and he ultimately reached the land of the white man and remained there. The superior knowledge of the white man has been acquired from him. "As traces of his passage through their country, they show extraordinarily shaped rocks and stones such as fragments which have fallen from above into the valley, and rocks and stones which have lodged in strange positions. But there are no ceremonies with reference to these and the natives have no fear of them". They say his footprint is on a rock in the Aduala River ³⁾.

Here we have again all the characteristic features of the stone-using culture heroes: Tsidibe is a culture hero who typically enough introduced agriculture and other things. The theme of the footprints occurs once more, as does also the final departure from the natives. With regard to the information that he finally went into the country of the white man, the question arises once more as to whether this points to his light skin, as in the numerous cases already mentioned. It might even be asked whether the "extraordinarily shaped rocks and stones" or the stones "in strange positions" of which WILLIAMSON speaks, are not megaliths which he did not recognize as such. But even if they were not, the very fact that the trace of this culture hero is marked by stones at all, is significant. There still remains the highly important information given in the myth that Tsidibe migrated from east to west, and we shall presently discuss this.

Further south-east, more recent elements are found near Mt. Scratchley, whose inhabitants are considered by SELIGMAN as Papuo-Melanesians ⁴⁾. In this connection, it is very interesting to note that the Upper Vetapu River "bore the thoroughly Polynesian name of Wai Tabu, or sacred river" ⁵⁾. On Mt. Yule, and farther east near Mt. Albert Edward, and on the Chirima River, people with lighter skin were noticed ⁶⁾, which MACGREGOR attributes to what he calls Polynesian influence ⁷⁾. In the Mt. Yule region, numerous short people as well as tall individuals were also found, a fact which has been considered by several writers as indicating a racial mixture ⁸⁾.

In the village Neneba, on the eastern slopes of Mt. Scratchley, where

1) WILLIAMSON 957 75 f, fig. 2, CHINNERY 151 272. 2) 1927/28 31. 3) WILLIAMSON 957 264-266, LISTON-BLYTH in 712 (1922/23) 20. 4) SELIGMAN 773 330, WILLIAMSON 957 13. 5) MURRAY 595 302. SMITH 785 324. 6) In MURRAY 595 97. 8) STRONG 849 302, MURRAY 596 26, D'ALBERTIS 15 409; it might be added that CHALMERS and GILL—135 162, quoted also by HADDON 329 155—mention some natives from the Yule Range who visited the Kabadi to get salt and make sago.

a Papuan language is spoken¹⁾, the following mode of disposal of the dead is usual: The people "placed their dead in a box covered by a net, about 8 feet from the ground and enclosed by a fence of about the same height, outside of which is a ring of large flat stones. When the skeleton is clean, the skull is removed"²⁾. But nothing else is recorded regarding this arrangement of stones.

Near Mt. Albert Edward, MONCKTON found a stone pestle, and he further discovered here "a solid stone pillar about three feet in diameter and four in height, very weather-worn, and crowned by an enormous and very eroded stone bowl"³⁾. Its highly significant that the stone bowl was found upon the stone pillar, and it seems probable that the stone pillar was worked.

Yodda Valley: The Papuan speaking inhabitants of the Yodda Valley to some extent resemble the western Orokaiva in race, language, and customs⁴⁾. CHINNERY, apparently basing himself upon the prehistoric finds made in this region, declares⁵⁾: "While the fact that they are invaders or immigrants into the Yodda Valley is beyond all doubt, their original home is not altogether clear".

With regard to the use of certain plants, we are told only that croton is used as ornament during initiation⁶⁾.

Prehistoric objects. In the Yodda Valley stone mortars and a pestle were unearthed 12 feet below the surface. Particularly sensational was the discovery of an obsidian axe or adze blade of extremely fine workmanship found with the mortars and the pestle. SELIGMAN has shown that this axe, in shape and technique, resembles so nearly the Easter Island obsidian blades, that he maintains the existence of a definite relationship, and he thinks, as most students have done regarding the stone mortars and stone pestles, that this blade "may well be a relic of the period when the ancestors of the Polynesians were passing through Melanesia to reach their homes in the Eastern Pacific"⁷⁾. Moreover a piece of clay stone was dug up, which had some resemblance to the human form⁸⁾. This certainly reminds one of the stone figures of the neighbouring Girewo River. Stone mortars were also found in Andacota, about 15 miles east of the Yodda

1) RAY 702 403 Note 1, 703 80, HADDON 325 437. 2) HADDON 328 179.
 3) MONCKTON 577 37, 118, Pl. 3 p. 268. 4) SELIGMAN 773 265, CHINNERY 146 69,
 RAY 702 403 Note 1, HADDON 325 437; 712 (1920/21) 50, (1927/28) 36. 5) 146 69.
 6) CHINNERY 146 77. 7) FINSCH and BÜHLER have compared this obsidian axe
 with the obsidian battle axes of the Admiralty Islands. A similar obsidian axe was
 found with the Maori. Obsidian points were obtained on Goodenough Island,
 Misima, and Mufua. SELIGMAN and JOYCE 777 327, Pl. VIII fig. 1, 2, 6, 7.
 8) MONCKTON 577 Pl. p. 120, 712 (1904/05) 31, MURRAY 595 373 f, BARTON 46 1,
 ETHERIDGE 233 24, Pl. VI fig. 1, 2, SELIGMAN 774 161 f, Pl. M fig. 1, 2, fig. p. 161,
 SELIGMAN and JOYCE 777 327-329, Pl. VIII fig. 2, Pl. IX fig. 7, SELIGMAN in WOOLFORD
 984 52, CHINNERY 151 271-275, PÖCH 674 71, *Journal of the Polynes. Soc.* (1910) 223.

goldfield, and Egasusu, 7-8 miles east of Andacota¹⁾, i.e. actually in the western region of the Orokaiva area, in which the occurrence of stone mortars has already been mentioned.

Before discussing the migration of Tsidibe, I shall give the following data:

Waria: On the Lower, Middle, and Upper Waria, the people are dark-skinned and woolly haired, but there are also light-skinned people in all three regions, though it seems that the light-skinned people predominate on the Upper Waria. Similarly, the people become shorter as one proceeds from the coast to the interior²⁾. It cannot yet be determined whether these facts are against the probability of a mingling of races, since sufficiently detailed anthropological data are lacking, and I quote these data for what they are worth. The language of all the Waria people is Papuan and, in the case of the coastal tribes, the language, culture and physique show strong resemblance to the Binandele³⁾. The coastal people Suwena, actually came originally from the Mambare; the Yema, who also belong to the Orokaiva, migrated from the Waria to their present home⁴⁾. The Lower Waria people have trading relations with the Orokaiva, whilst the trading relations of the Upper Waria extend to Papua, to the Kunimaipa River (Lakekamu), and northwards to the Upper Bialolo River⁵⁾.

BEAVER⁶⁾ gives the following not very definite information: "On the elevated grass plains of the Waria River, I saw small cairns which were obviously tribal boundaries, and which looked suspiciously as if they had been carried there, although they may have been natural".

DETZNER⁷⁾ says of the houses of the Lower Waria: "Between the posts wooden logs, tree bark, and sometimes stones are put thus forming the wall"; but by this an occasional and not systematic use of stones is apparently meant.

Sacred Plants. On the Upper Waria, corpses are put until decomposed into upright structures around which low fences are built. In all cases croton was planted inside these fences. At a peace-making ceremony a dracaena was planted in the village as an emblem of peace⁸⁾.

Prehistoric objects. In Sopa village, on the Upper Waria, a large stone mortar was found⁹⁾. A stone pestle was found on the Lakekamu

1) CHINNERY 151 272. 2) DETZNER 191 28, 192 114, 116, 127, CHINNERY 144 35, 38-41. 3) WILLIAMS 944 5, PILHOFER 659 21, CHINNERY 144 9, 29-31, NEUHAUSS 603 1 124. 4) CHINNERY 144 8, 29, F. R. CAWLEY in 712 (192223) 25. 5) WILLIAMS 944 5, CHINNERY 144 17, 34 f, 42, 55. 6) 55 272. 7) 192 144. 8) BEAVER 55 268, CHINNERY 144 23. 9) CHINNERY 144 14, Pl. 4; MURPHY 595 39 f, Pl. B has given us information regarding the fashioning of singular stone gongs on the Upper Waria. The gongs are used in certain feasts by sounding them with a stone pencil. This instrument is quite an isolated case in Melanesia. We shall therefore not discuss here to what stage of culture it can be attributed.

River in the district of Papua¹), and it may further be mentioned that terraced irrigation was found on Mt. Chapman; the relation of this highly developed type of agriculture to the culture of the stone-using immigrants will be discussed later on²).

We are now in a position to discuss the direction of the migration of the stone-using culture hero Tsidibe of the Mafulu. This, it will be remembered, is already the second tradition which tells of an east-westerly migration in this region. The first tradition of this kind was found with the Sogeri, and although some elements are lacking for a complete reconstruction of such a migration, it was seen that if it took place at all, it could only have been a migration of stone-using immigrants. On the other hand, the prehistoric objects mentioned which were found in Veipa, Mafulu, Mt. Yule, Lakekamu River, Mt. Albert Edward, Boli, Upper Waria, Aikora River, Mambare River, Orokaiva, Yodda River, Andacota, Engasusu, Holnicote Bay, and Girewa River actually lie on an east-westerly line crossing the whole of New Guinea, deviating somewhat to the north and to the south. Such a line does not seem to be identical with that which passes further south from Dauko and Sogeri to Wanigela. The most southerly branch of the northern line, viz. the Yodda Valley, is, however, not very far away from Kagi, which we have seen to be one of the most northerly points to which the supposed southern line deviated.

Some stone work was found along the northern line, viz. with the Mafulu, near Mt. Scratchley, Mt. Albert Edward and the Waria River, although some of the information lacked precision; also on this line, terraced irrigation was found on Mt. Chapman; at numerous points along this line, the use of sacred plants so characteristic of the stone-using immigrants was encountered, and characteristic mythological themes were found among the Kuni and the Mafulu at least. At almost all these places on this line, light and often very light-skinned people were found side by side with dark elements, a fact, which in numerous cases was actually considered to be a mingling of races. Thus on this line we find a great number of elements which all testify to the presence of the stone-using immigrants. The geographical distribution of these elements is in fact borne out by the Mafulu myth affirming a east-westerly migration in this area, and in these circumstances CHINNERY's information that the Yodda people are immigrants assumes an even greater importance. Finally, it has been seen that in this area trading relations crossed the whole of New Guinea, linking both coasts, so that

1) MURRAY 595 373, fig. p. 142, STRONG 851 98, CHINNERY 151 247; for general information regarding stone mortars and stone pestles of New Guinea without details as to the localities see: SELIGMAN 773 249; 712 (1921/22) 25 f, Pl. 10-15, (1938/39) 24. 2) One of the discoveries made in the region round Mt. Chapman is the making of pottery by men (CHINNERY 154 453). The method used is not indicated, but the fact that the men are the makers of this pottery is perhaps an indication of its ritual character. Further investigation on the spot is necessary to clear up this point.

in accordance with the view already expressed they can actually be considered as indications of old migrations of cultures. I am therefore of the opinion that here a migration of the stone-using immigrants has taken place from the east coast to the west, traversing the whole of New Guinea. A second crossing of New Guinea by the stone-using immigrants further to the south is at least probable, although the elements for the reconstruction of this migration are less abundant. On the other hand, there is perhaps no need to separate these two migrations; we can consider them as two waves of one great infiltration. In this case it would follow that the stone-using immigrants crossed the whole of New Guinea on a large front in this part of the great island which is relatively narrow.

We now turn to the study of the Mandated Territory.

Huon Gulf: The Melanesian tribes, which inhabit a narrow strip of the coast of the Huon Gulf from Peihowa northwards as far as the north of Finsch Haven¹⁾ vary in skin colour from a yellowish brown to dark brown. The hair is woolly, frizzy, but sometimes also wavy and straight. The semitic features and aquiline noses of some individuals are apparently due to mingling with the neighbouring Papuans. In some cases epicanthus has been observed, and individuals were found "whose eyes reminded one of Chinese"²⁾; BAMLER considers the Tami people as of Melanesian race "but with probably strong Polynesian influence"³⁾. The trading relations of all these tribes are so intense that it can be maintained that almost all the tribes from Morobe in the south, as far as beyond Finsch Haven in the north, including also the Papuan Kai, Kai of the Sattelberg, Cape King William and Poum, have more or less direct trading relations with one another. The trading centres Tami and Siassi have trading relations with many tribes of the Huon Gulf and the adjacent coast northwards. On the other hand, they trade with Rook Island and the west and south coast of New Britain, so that, as has already been mentioned, there is some connection by trading between New Britain and New Guinea. There are, furthermore, direct trading relations between Rook Island and New Guinea⁴⁾.

The use of stone for graves has been similarly recorded of several tribes of the Huon Gulf. In Nanga, a Boang village, a grave is surrounded by wooden planks and covered with stones. Near the grave a few "ornamental plants" are planted⁵⁾. In Bussamang village, near Samoa Haven, graves

1) These are the Boang, Kaiwa, Labo, Lae, Abo, Jao, Bukaua, Lae Womba, Jabim, Tami, and Taminugetu; regarding their Melanesian languages see: NEUHAUSS 603 122, 124, 126 f, LEHNER 486 397, CHINNERY 146 28, 31, RAY 704 319, SCHELLONG 812 129 etc. 2) CHINNERY 146 28 f, 31, NEUHAUSS 603 98, 126, 604 281, LEHNER 491 45 f, ZAHN 987 290, SCHELLONG 812 46, FINSCH 236 179 etc. 3) 44 489. 4) NEUHAUSS 603 77, 121, 124, 191, 325 f, 370, 410 f, CHINNERY 146 28 f, 31, LEHNER 486 398 f, 409, 453 490 264, 284, KEYSER 428 9-11, 34, 58, BAMLER 44 494, 505, 519, ZAHN 987 289, 310, 312, 315 f, SCHELLONG 813 605 f. 5) NEUHAUSS 603 168.

are surrounded by wooden planks or an enclosure of stones; inside the enclosure, gravel stones are scattered forming a layer at least 4 inches thick. At the head of the grave an ornamental shrub is sometimes planted¹⁾. In the same way the Bukaua surround their graves with larger stones and throw gravel upon them. Here also ornamental shrubs are planted upon the graves²⁾. The same custom exists in Taminugetu, the Tami colony on the mainland. They surround the graves with larger stones and throw gravel upon it³⁾. The Jabim also surround their graves with a frame of wood or stones, and throw coral stones upon them. Variegated ornamental shrubs called "Ssankala" are planted upon the graves⁴⁾. The people of Cape King William are Papuan in race and language⁵⁾, but trade with the Melanesian Kelana; the majority of their songs come from the Siassi⁶⁾, and they have a myth which describes a man who covered a grave with stones⁷⁾. From the following discussion on some of the Papuan tribes who have been influenced by their Melanesian neighbours, it will be seen that the influence of the stone-using immigrants is by no means limited to the Melanesian tribes.

Sacred Plants. Among the Bukaua the following customs exist: After an avenger has taken his revenge he plants a *cordyline terminalis* (sem) on the grave of the avenged dead; if the man had been killed in another village, this plant is nevertheless planted in the village of which the dead man was a native; if the dead man is brought back to his village his skull is buried underneath the *cordyline*. To encourage the growth of taro plants, leaves of *croton* (bam) are used; taro seeds and various ornamental shrubs are planted together; all of the shrubs are of the order *euphorbia*; they are intended to give beauty and sweet perfume to the fruits. *Croton* leaves must also be worn by the balum dancers. To prevent an impending conflict, an old man hurries to the spot "with the token of balom"; this is *croton* (bam), for *croton* is a token of peace. Some of the spirits of the dead in the afterworld change themselves into ornamental shrubs. A few other ornamental shrubs are used also, but their botanical names are not recorded. In fish magic, pieces of the ornamental shrub "salingbang" are used; to protect a child against an evil spirit the ornamental shrub "saling" is used; in the magic to obtain a good voice the ornamental shrubs "salingbang" and "kama" are used⁸⁾, or the ornamental shrub "saling" it put into the armlet. A certain ornamental shrub is also used in the magic by which the growth of pigs is intended to be encouraged. For the

1) NEUHAUSS 603 168, fig. 78 p. 168. 2) NEUHAUSS 603 168 fig. 79 p. 169, LEHNER 486 408, 474, 488 46. 3) KÄRNBAACH 424 171 f, FIERERL 252 Pl. 28. 4) SCHELLONG 812 46, 96, FINSCH 236 176; this corresponds to the "sangkalac" shrub of the Bukaua; this is apparently *croton*, for HAGEN who quotes the information of SCHELLONG, says that the graves were planted with *croton*. 333 263. 5) NEUHAUSS 603 69, 71 f, FIERERL 252 133. 6) NEUHAUSS 603 72, 512. 7) STOLZ 844 264. 8) On Tami Island, "kama" is the *cordyline* (DEMPFWOLFF 189 334) so that without doubt this is also the case with the Bukaua.

initiation of girls, it is prescribed that they shall be decorated with the leaves of the ornamental shrub "sangkalac" (i.e. probably croton)¹). On Tami a little earth is taken from "evil places" which are haunted by spirits, and is used in magic; on the spot from which the earth had been taken away, a croton is planted. The ceremony of the fishing for the soul of a child occurs here in the usual form: a calabash is fastened to a stake by a cord which is decorated with croton and hibiscus leaves. "The soul goes over to the variegated leaves and sits down on the calabash"²). The ornamental shrub "saling" of the Bukaua is called by the same name by the Jabim, who plant it together with the ornamental shrubs tangile, singem, kalaun, etc. in a little enclosure on the village ground. This is similar to the "Zierhügel" which we shall come across later on. Croton, which the Jabim also call "bam" as do the Bukaua, is carried in the hands by the balum dancers, as in the case of the Bukaua; in order to ascertain whether a neighbouring village is friendly or hostile, a broken spear with a bunch of croton leaves fastened to it is sent to that village as an inquiry whether there shall be peace or war, so that here croton is probably also a token of peace as with the neighbouring Bukaua. Here too the ornamental shrub "kama" is known by this name. Its leaves are used in weather magic. To encourage the growth of a garden, the Jabim grow red coleus between the plants. They also use a certain ornamental shrub in sorcery³). The Kai of Cape King William use, among other things, a fibre of a cycas palm as a protection against sorcery, and a certain spirit is said to produce thunder by pulling up cycas palms, with which he strikes stones⁴).

The pygmoid and Papuan speaking Kai of the Sattelberg⁵) who are characteristic inland people, have been strongly influenced by their Melanesian neighbours. They have marriage and trading relations with the Melanesian Jabim, and trading relations with the Melanesian Siassi and Tami⁶). The Kai have adopted from the Melanesians the "Ngosa" feast, which is identical with the balum feast of the Melanesian tribes of the coast. How far the influence of the coast penetrated here into the interior, is shown by the fact that the balum feast occurs even with the Burrum, west of the Hupe⁷). It is evident from the many prehistoric objects found in the area of the Kai of the Sattelberg that their country has also been touched by the stone-using immigrants.

In black magic the Kai of the Sattelberg use the leaves of the ornamental shrub "gama", "which also in another way plays some part in the customs of the natives". This is certainly identical with the cordyline "kama" of the Bukaua, Tami, and Jabim. To protect pigs against evil influences, the

1) NEUHAUSS 603 168, LEHNER 486 401, 422, 435, 443, 454 f, 458, 460, 490 248, 260, 271, 275 f, 489 106, KEYSER 427 28. 2) BAMLER 44 517 f. 3) ZAHN 987 309, 371, 374, 376-78, ZÖLLER 989 401, SCHELLBING 811 152, 812 121, KRIEGER 441 186, 200, HAGEN 333 251, 269. 4) STOLZ 844 250 f, LEHNER 489 110. 5) NEUHAUSS 603 127, 604 248, PÖCH 667 384, 665 225, 677 610 etc. 6) KEYSER 428 160, NEUHAUSS 603 274, 390 f, 404, 410 f, 498, 506, 604 284. 7) KEYSER 428 34-40, DETZNER 191 99, 131, 187.

ornamental shrub "sebulu" is used; other ornamental shrubs are used in love magic. As a reminder of a debt contracted, the ornamental shrub "ware" is planted in the village¹).

Prehistoric objects. In the area of the Huon Gulf very many prehistoric objects have been found. In the Bukaua region a few pestles of lava and some earthenware rings were found. The natives ignored entirely the origin of these objects and used them in magic. In the region of the neighbouring Taminugetu, a stone mortar was found²). Moreover, in the Bukaua region an anthropomorphic stone image was found carved out of very hard serpentine. The workmanship of this figure was exceedingly fine. NEUHAUSS has suggested that the cone-shaped structure on the head of this figure represents a certain type of hair-dressing in which the hair was tied together, as it is still to-day in certain parts of the coast of the Mandated Territory³).

I am, however, of the opinion that this does not represent a type of hair-dressing, but a hat. It has been seen that among the rock carvings of Ulawa, which we have attributed to the culture of the stone-using immigrants, men with hats were represented; the analogous stone figures on the dolmen in Arosi had a sort of hat; the stone-using immigrants Sina Kwao and Gwau Meo of Malaïta were said to have worn hats on their red hair; in one of the Ambat myths of Malekula it is said that the Ambat wore hats⁴). Hats were also worn in the Tamate Societies of the New Hebrides. SPEISER⁵) has pointed out that many of the upright gongs of the New Hebrides have a pointed hat, and he draws the conclusion that the use of hats must be connected with the culture of the megalithic people. It can further be added that the stone images of Easter Island also have a kind of hat⁶). For these reasons, I consider the hat of the little stone image of the Bukaua as a further proof that this image belongs to the culture of the stone-using immigrants.

Almost completely identical anthropomorphic stone images carved out of serpentine, were also found in the neighbouring area of the Jabim. These images show in an identical manner the pointed round hat, and they are carved in a crouching position agreeing completely in this detail with the stone images of the Arosi. These stone images were used in magic by the Jabim⁷).

In the old village site of Logaueng, south of Finsch Haven in the Jabim District, which, as far back as the people can remember, was not inhabited, a stone mortar and many richly decorated potsherds were unearthed. The decoration of these potsherds differs considerably from that of the pottery

1) KEYSER 428 99, 120-122, 126-128, 427 41. 2) NEUHAUSS 603 137, 140, fig. 55, 56, LEHNER 486 449. 3) NEUHAUSS 603 140-142 fig. 57, 58, LEHNER 486 449, CHINNERY 151 279. 4) DEACON 184 624 f. 5) 804. 6) BALFOUR 43 (1917) 28, MACKENZIE 521 47 f. 7) NEUHAUSS 603 143-145 fig. 59, 60, 61.

of to-day¹). Unfortunately, nothing is recorded regarding the method by which these pots were made.

On the village ground in the little village of Ago on the coast between Finsch Haven and Cape King William, another stone mortar was found²).

A great number of stone mortars and a few stone pestles were found in the Sattelberg region, and also as far inland as twelve hours journey from the Sattelberg. One of these mortars has four handles³) thus completely agreeing with the stone mortar of Ambat and that of the Gima River (West New Britain).

Mythological evidence. The reciprocal influences among the Melanesian and Papuan tribes of the Huon Gulf are discernable also in their myths which show great resemblances, and are actually identical in many cases⁴).

The themes which we have found to be associated with the stone-using immigrants occur here again, and in some cases the resemblance is very striking.

The following myth is known by the Tami: Kalomatu went to hunt birds. His elder brother went fishing while his wife stayed in the garden. When Kalomatu shot his arrow, it fell into his brother's garden. The woman saw the arrow and hid it because she liked its beautiful carvings. Kalomatu searched everywhere for his arrow, and when he saw the woman he asked her whether she had found it. Then catching sight of his arrow, he asked the woman to hand it over to him, but she replied: "Come and take it yourself". He did not want to scale his brother's fence, but as the woman insisted, he passed over the fence. Then the woman asked him to tattoo the pattern of the arrow on her thighs. This he did, and when the tattooing was finished he took the leaves of a celosia, wiped off the blood and threw the leaves into the sea. They were carried by the current to the elder brother. He at once recognized his celosia, and returned home in his canoe. In spite of his repeated summons to meet him, the woman hesitates to do so, and when she finally gives in and goes to the shore to meet her husband he pushes the canoe back into deeper water. To follow him into the water the woman drew up her petticoat, and when the man looked back

1) NEUHAUSS 603 74, 145, 148, fig. 62, 64. 2) NEUHAUSS 603 137. 3) NEUHAUSS 603 1 18, 136-138, 406, fig. 51, 52, 53, 174, CHINNERY 151 278. 4) The following myths are identical with one another: Bukaua, LEHNER 486 484 f, and Jabim, ZAHN 987 386-388; Bukaua, LEHNER 486 480 f, and Jabim, ZAHN 987 368-375, and Tami, BAMLER 44 526-530; Bukaua, LEHNER 486 482 f and Jabim, ZAHN 987 384-386, and Tami, BAMLER 44 556 f, 560-562; Jabim, ZAHN 987 353 356, and Kai of the Sattelberg, KEYSER 428 185-187, 228; Jabim, ZAHN 987 349-351 and Kai on Cape King William, STOLZ 844 268 f; Jabim, ZAHN 987 372-375 and Kai of the Sattelberg, KEYSER 428 187-192, and Tami, BAMLER 44 540-543; Jabim, ZAHN 987 351 f, and Tami, BAMLER 44 559 f; Jabim, ZAHN 987 376-378, and Kai of the Sattelberg, KEYSER 428 225-227; Jabim, ZAHN 987 356-361, and Tami, BAMLER 44 551-553; Jabim, ZAHN 987 378 f, and Kai of the Sattelberg, KEYSER 428 200-202, etc. etc.

he saw the tattooing, and killed her. Then he ordered the people to prepare posts for the great men's house. They felled trees and carved them, and when they were ready he looked carefully at them all. Now it appeared that the pattern on the post of his brother agreed with the pattern tattooed on his wife's thighs. Then he ordered his people to make spears and they went to spear the younger brother; but he escaped, and with his family and relatives, climbed upon a Simboan tree. So they began to fell the tree, but although they worked hard until evening the tree did not fall. At night the younger brother ordered the ants to reunite the chips of the tree again, and when the people returned in the morning, the tree was again intact. This happened again and again, until one evening a boy took a chip home to warm himself, so that when the ants came at night to reunite the chips, one chip was lacking and a gap remained. The next morning when the people discovered this gap they were told by the boy that he had burned one chip; so they burnt all the other chips. The people then continued to fell the tree, and when it was on the point of falling to the ground, Kalomatu took his bow, shot an arrow into the sky and then one arrow into the other thus making a ladder. On this he and his family climbed up into the sky. But to the people he called out: "when I disappear you will lack taro, so that you will die, but when I reappear you will again have food" ¹). The same myth is also known by the Jabim with but very slight and insignificant modifications. Kalomatu is here called Nagogale ²).

Here again we have the typical story of adultery, as in the story of Qat, Barkulkul, Tortali and Ul Kugui and the numerous other stone-using immigrants. The detail of the hunter brother whose arrow falls into the house or garden of his brother's wife agrees completely with the Pentecost version of Barkulkul; the discovery of the adultery by means of the tattooed pattern agrees with the Barkulkul myth and the analogous Sulka story of the two brothers Nut sie and Nut vulau. Here again we find the reuniting of the chips as in the Qat story of the Banks Islands, and the stories of Dobu, Taupota, and Santa Cruz, whose association with the stone-using immigrants we have shown ³). The fact that Kalomatu ascends to the sky accords with the frequent association of the stone-using immigrants with the sky; and the manner in which this ascension is effected—on arrows shot into one another—also equates Kalomatu with Qat of the Banks Islands, Tagaro of Aoba, the son and the wife of Tagaro of Pentecost, and the sons of the sky-woman of Fate, all of whom ascended to the sky in this manner.

BAMLER ⁴) makes the following remark about the Tami version of this story: "Since bow and arrow are not used in the Huon Gulf, but from Cape King William to Astrolabe Bay, it is probable that this story belongs to this latter region. But Kalomatu's curse applies to the eastern

1) BAMLER 44 530-532. 2) ZAHN 987 389 f. 3) This theme occurs also in one of the Bukaua myths. See: LEHNER 488 68. 4) 44 532 f.

corner of the Huon Gulf, for in the months of May and June when the Pleiades are not visible, there is very little food. Last season's taro has come to an end and the yams are not yet ripe. They are not dug up until the Pleiades appear again". For this reason BAMLER has named this myth "The Pleiades".

In regard to BAMLER's first argument, it may be remarked that in the analogous Jabim version of this myth the adulterer brother is likewise described as having bow and arrow. In view of the existing trading and cultural relations previously discussed, the mention of the bow and arrow may of course be due to some influence from those neighbouring regions in which these weapons are used. But as pointed out, this story of the hunter brother whose arrow falls into the house of his brother's wife agrees with the Barkulkul story of Pentecost, and it has further been seen that this myth as a whole belongs to the culture of the stone-using immigrants; and we have in fact reached the conclusion that bow and arrow were the characteristic weapons of the stone-using immigrants. In these circumstances, the use of bow and arrow in the Tami and Jabim myth is by no means uncharacteristic, as BAMLER believed. His conclusion is based on too limited a knowledge. It is, on the contrary, highly characteristic that in an area where bow and arrow are unknown to-day, mention of these weapons is made in a myth which can be shown to be part of the culture of the stone-using immigrants. The very use of bow and arrow is indeed a further argument in support of the view that, on the one hand, this myth belongs to the culture of the stone-using immigrants, and that, on the other, the bow can be attributed to them. BAMLER's second supposition that Kalomatu is a personification of the Pleiades, since his departure causes a dearth of taro, must likewise be rejected. We have learned that one of the most characteristic events in connection with the stone-using immigrants is that they departed finally from the world, and it will be remembered that in numerous cases they were said to have taken the best things with them on their departure. Deterioration of the crops was the particular consequence of the departure of these beings who, as we have seen, were the introducers of new food plants; and, in this connection, we might recall the warning of the figona serpent Hatuibwari of San Christoval when, before leaving, it said: "I go, but your crops will fail". It is therefore very significant that Kalomatu's departure also caused deterioration of the taro crop. BAMLER's explanation can therefore only be qualified as an unjustifiable generalization. The problem whether there has originally existed any association between the stone-using immigrants and the cult of the heavenly bodies will be discussed more fully later on.

There are a certain number of other myths in the Huon Gulf which must likewise be attributed to the stone-using immigrants.

The Kai of the Sattelberg have the following myth: There was once a group of brothers. One night the Bozazang women (Bozazang is a kind of rattan bearing large edible fruits) descended from their tree and did the

work of the brothers. In the morning they returned to their original place as fruits. When they were eventually discovered, the youngest brother climbed the tree and threw down the fruits, one for each brother, but he descended cautiously with his own fruit. On reaching the ground each fruit became a woman, but in the fall each one was marred in some way. Only the youngest brother's wife was beautiful and perfect. This roused the envy of the brothers who made many attempts to get rid of him. They took him to a pool saying they were going to fish. But when the pool had been emptied a hole became visible. They then commanded their brother to descend into this hole to look for crabs and eels. When he was in the hole, they covered it with big stones. Then the tame cockatoo of the youngest brother went to look for its master, and when it found him, it removed the stones and liberated him. On another occasion the brothers went into the forest, and when they came to a high tree where a cockatoo had its nest, they ordered the youngest brother to climb the tree; this he did by means of a rattan, but when he was up above, the brothers pulled down the rattan, so that he was unable to descend. Again he was saved by his cockatoo which brought him a rattan on which he was able to descend. After some time, the dry wood had to be burnt in their garden. They persuaded their brother that, in order to be successful in gardening, one of them must dance in the middle of the garden, while the others set fire to the dry wood. The youngest brother declared himself ready to dance, and in the fire which was made by the brothers he was burnt to death. To avenge his death his widow killed all the other brothers, but when their wives saw that their husbands were dead they hanged themselves as did also the widow of the youngest brother¹).

In this story we are again confronted with a group of brothers, as in the numerous stories of the stone-using immigrants. Again the story of adultery occurs, as in the case of Kugui of the Bougainville Strait, and in the analogous stories of the Nasioi, Alu, and Sulka. In the same way, the brothers of Qat of the Banks Islands and of Ambat of Malekula envied their brother his beautiful wife, and tried to kill their brother. The resemblance of these Qat-Ambat stories with that of Warohunuga of San Christoval, and with that of the "Delectable Lizard" of Saa, has already been shown. The attempted killing by descending into a hole, happened in the same way in the stories of Qat (Banks Islands), Barkulkul (Pentecost), Warohunuga (San Christoval), the "Delectable Lizard" (Saa), and Tokosikuna of the Trobriand Islands. There is complete identity in this detail, particularly with the Qat story, since Qat is also ordered by his brothers to descend into a hole in order to look for crabs. Also the rescue from the hole and from the tree by the cockatoo, is very similar to the incident related in the Qat story; there, it was the spider Marawa which liberated Qat from the hole and made it possible for him to descend from the tree.

1) KEYSSER 428 228-230.

This latter attempt to kill by the climbing of a tree from which descent is impossible, occurred in a similar manner in the stories of Qat, Warohunuga, the "Delectable Lizard", and Okeru. In the Okeru story, Okeru tore the rattan down in a manner similar to that related in our present story, and in the other stories the brothers caused the tree to grow, thus making descent impossible.

The following myths show that we are not only confronted with a sporadic recurrence of some isolated mythological themes characteristic of the stone-using immigrants, but that the whole set of these myths occurs here again.

The Jabim have the following myth: Once there were four brothers. One day came the Dingme, an ogre, with his water vessel¹). He sent the eldest brother to fetch sea water, and when he brought the water, the Dingme asked him to accompany him home. They went together until they came to a deep ditch. This the Dingme crossed by means of a big tree which he withdrew on reaching the other side replacing it by a frail split betel palm. When the boy was in the middle of it, the betel palm broke and the boy fell into the ditch. The same thing happened to the second and third brother and also to the fourth. But when the latter accompanied the Dingme, he took his dog and his mouse with him, so that when he fell down to his brothers the mouse gnawed a way out whilst the dog emptied out the earth, the brothers themselves also digging until they came out again. When the Dingme came back, they killed him and buried him²).

The same story occurs with but insignificant variations among the Kai of Cape King William³), and the Kai of the Sattelberg⁴). In the former story the ogre is called Zemneba, and in the latter his name is Wamondang; the first myth deals with four brothers; in the second, there are sisters. In the second version, the youngest sister, after having liberated the other sisters, climbs up a tree with them whose branches they have sawn slightly; when the ogre tries to follow them on the tree the branch breaks and he falls to the ground and is killed.

The Jabim and the Kai of the Sattelberg have, further, the following story of four brothers, the versions varying only very slightly in these two tribes: The eldest brother once went shooting fish with bow and arrow; the living fish he put into the sand and continued fish shooting. Suddenly he saw a bread-fruit tree which he climbed to fetch some of the fruit. The Dingme heard the fruits falling, and when he asked who it was the fish in the sand replied, so that the Dingme was afraid of so many people. The same happened to the other brothers. But they said nothing of this to their youngest brother, so that when the latter went shooting fish he killed the fish. As the fish could now no longer reply and so deceive

1) For the numerous Dingme stories of the Jabim see: ZAHN 987 337-346.
2) ZAHN 987 345 f. 3) STOLZ 844 282-286. 4) KEYSER 428 230-233.

the ogre, the ogre knew that the man was alone and went to kill him; but by cunning, the man succeeded in killing the ogre. In the version of the Kai of the Sattelberg it is furthermore recorded that: "To escape the revenge of the dead ogre, the hero and his brothers took to their canoes and with them went over the sea into another country"¹). There are many stories of these four brothers (in some of them the number of brothers is not stated) known to the Jabim, Kai of the Sattelberg, Kai of Cape King William, and Tami, in which the man-eating ogre is killed by the youngest brother. These stories all show great similarity²).

An analysis of these stories reveals a great number of themes which we have seen to be associated with the stone-using immigrants. In the same way as the ogre tries here to kill a group of brothers, Qasavara tried to kill the Qat brothers of the Banks Islands, Merambuto tried to kill Tagaro and his brothers in Aoba, Nevinbumbaau tried to kill Ambat and his brothers in Malekula, and the same theme occurred in connection with the analogous heroes in Tanna, Futuna, etc. In our present story the brothers are thrown by the ogre into a hole from which they are saved by the youngest; quite similarly Nevinbumbaau let the five Ambat brothers fall into a hole, from which they were rescued by Ambat who "speared" into the earth which opened; in the same way Teramsamus of Tanna threw the white brothers into a hole, from which they were delivered by Matiktiki, and the same story has been recorded in Futuna. The fact that the ogre's attention is aroused by the falling of one of the fruits from his tree, occurred similarly in the Qat story and in the stories of the Sulka and Goodenough Island. The escape up a tree from the pursuing ogre and the subsequent killing of the ogre, has very frequently been encountered, as for instance in the story of Qat of the Banks Islands, of Matiktiki of Tanna and further in Futuna, Aniwa, Malaita, Buka Passage, the Gazelle Peninsula, Bola, etc.³). It is further worth pointing out that, in the versions of the Jabim and the Kai of the Sattelberg, the brothers are also armed with bow and arrow, and it is reminiscent of the final departure of the stone-using immigrants that, in the version of the Kai of the Sattelberg, the brothers finally departed into another country.

In one of the myths of the Kai of the Sattelberg, the brothers kill the man Mau with the big penis. KEYSSER⁴) records: "The amputated penis of Mau lay petrified on the village ground," a remark which is strongly reminiscent of the "Penis of Ambat" and the other analogous stories of

1) ZAHN 987 337-339, KEYSSER 428 211-213. 2) For these completely identical stories see: ZAHN 987 343 f, KEYSSER 428 171-178, STOLZ 844 265 f, BAMLER 44 555 f; the following stories somewhat resemble one another: Kai of the Sattelberg, KEYSSER 428 239-241, this story tells of three brothers; Tami, BAMLER 44 533-535, 553-555; Kai at Cape King William, STOLZ 844 278 f; Jabim, ZAHN 987 343. 3) The theme of the lengthening of an areca palm also occurs in a story of the Kai of the Sattelberg (KEYSSER 428 237), but without any apparent connection with either of the other themes characteristic of the stone-using immigrants. 4) 428 168-171.

Lihir and particularly of the Trobriand Islands. Unfortunately, nothing else is recorded about Mau, or regarding the shape of this stone, but in view of the fact that monoliths are frequent in New Guinea, it is possible that this stone was a monolith too.

The story of the man-eating ogre who devoured most of the people so that the rest decided to emigrate, is also known with but insignificant variations by the Kai of the Sattelberg, the Kai of Cape King William and the Tami. In the Cape King William version the ogre is called Zembena; in the Sattelberg story and that of Tami it is a giant woman called Kwang-gia. When the people took to their canoes, a pregnant woman wished to go with them. Three canoes into which she tried to step, she caused to sink (Cape King William version). According to the Tami version, this woman was the sister of three brothers, whose canoes she caused to sink when trying to enter them. Therefore a pit was dug for her, and she was left behind in it and in this pit she gave birth to two boys. According to the Tami version, the woman cut her finger, and from the blood the two boys arose. These boys killed the ogre; but according to the Sattelberg version, they previously killed a man-eating eagle; according to the Tami version, they killed first the eagle, then a wild boar, then an octopus and finally the ogre. The weapons which they used were bow and arrows. Pieces of the ogre's body were sent to the people who had fled and who thereupon returned ¹). This mother of the heroes, it will be remembered is the sister of Qat in Maevo, and the sister of ten brothers in Santa Cruz; in the Sulka story, she is the daughter of the creator-woman of the sea, in the Gazelle Peninsula the mother of To-Kabinana and To-Korvuvu, and in the Trobriand myth according to which she is also left behind by her brothers, she is the mother of the stone-using culture hero Tudava. It is therefore very significant that, according to the Tami version, she is the sister of three brothers, since there are, as we have seen, good reasons for attributing the groups of brothers in the whole of the Huon Gulf to the cycle of myths of the stone-using immigrants.

According to a Jabim myth, a man is swallowed by a wild pig, but with the help of his brother he cuts his way out again ²). But these beings have no other special characteristics. In Tami this theme appears in the form of two men who are swallowed by a whale; when they begin to cut the entrails of the fish it vomits them out on the shore of the country of the women. They married two women, who became pregnant. But there it was the custom to cut the womb of the pregnant women to take out the baby and to bury the mother. These two men introduced normal birth, and are therefore in some way culture heroes. With their children they are brought back to their village by the moon ³). This theme of the introduction

¹) BAMLER 44 540-543, STOLZ 844 266-268, KEYSSER 428 178-180. ²) ZAHN 987 361-364. ³) BAMLER 44 550 f.

of normal birth, it will be remembered, has been found in more or less distinct association with the stone-using immigrants.

The cutting asunder of the bodily openings which theme had been found in Santo, Fate, Tanna(?), and Eddystone in connection with the stone-using immigrants, is found again in a myth of the Kai of Cape King William, where the characters are two brothers who, however, share none of the other characteristic features. It is only said that they came to their grandparents who had no mouth, but an opening on the head instead. They cut a mouth and closed up the hole in the head¹).

In one of the myths of the Kai of the Sattelberg, a big snake is described as the introducer of food plants, agreeing thus with the numerous culture heroes of the stone-using immigrants having the form of a snake. This snake once pursued two sisters who fled before it and found refuge in the house of a man who promised to protect them. When the snake put its head into the house, the man cut its head off, and continued to cut until the entire snake was cut to pieces. The people of this country had no knowledge of agriculture, and had only the fruit of trees to eat. The pieces of the snake took root; from the head sprang the long variety of yams, from the blood the red yams, from the body several other varieties of yams, and from the tail the curved variety of yams. Then the people made gardens and planted these fruits²).

In a myth of the Kai of the Sattelberg the ascension of two men to the sky is mentioned³), and according to a Jabim myth, men originally lived in the sky⁴). But the beings in these myths have no other characteristic features.

We must now discuss the problematic story of Panku lanqa, of which Bamler gives the following account: The first white man who landed on Tami is said to have been the mythical Panku. The spot is still shown where he put his iron pole into a hole in the rock, to fasten the rope to it. The possessor of the second ship which landed in Tami, was Ngamet. The crew of this ship used bows and arrows as weapons. The white people had a quarrel with the Tami because of the coconuts which they fetched from the island. Since bows and arrows were used as weapons, it is to be supposed, says BAMLER, that this was the ship of a Malayan or Chinese. Panku changed himself into different beings, e.g. into a white man, into a snake, etc. Once he came to the north coast of Rook Island where he saw a woman whom he liked very much. So he changed into a hibiscus leaf, which sprang up at her side. The woman gathered the leaf, whereupon it changed into a high wave, which washed her away. She became Panku's wife and bore two boys, Ngamet and Kapimolo. Then they travelled on and came to Gob (Willaumez Peninsula). Then Panku returned to the little

1) STOLZ 844 262 f. 2) KEYSER 428 180-185. The record of the origin of the coconut in the Tami myth (BAMLER 44 546 f) is quite different from the other typical myths mentioned so far. 3) KEYSER 428 209 f. 4) KUNZE 448 110 f.

island Aromot near Rook Island, where he changed himself into a snake with a human head. "From there on they did not see him again until he beat the Kamalandja people (Long Island)."

To this BAMLER remarks: Panku is probably a whaler, who a hundred years ago fished frequently round Rook Island. In Kapimolo some resemblance to the word "captain" may be perceived; "he beat the Kamalandja people" applies to the landslide of Mt. Cerisy on Long Island, regarding which VON SCHLEINITZ remarked in the *Nachrichten aus Kaiser Wilhelmsland*, 1887: "The catastrophe cannot be old, the traces are still too fresh". Similar catastrophes have often been attributed by the natives to the white men, as for instance the catastrophe of 1888 which was attributed to HUNSTEIN and VON BELOW. On the basis of these facts, BAMLER supposes that the arrival of Ngamet's ship took place about 1840. In BAMLER's opinion, this myth originated in the following way: Panku, a white man, took a native woman with him; some years later another ship came to this region, and the natives thought these white men to be the sons of that woman. BAMLER further records that Panku is considered by many natives as a god and ranks with Anuto, the creator of the sky, earth and man. The Tami say he is sitting under a big rock, and when he moves there are earthquakes. It is possible, says BAMLER, that on Rook Island and Long Island he is even more venerated than Anuto¹).

It is very much to be regretted that only few myths are recorded in these latter islands. Regarding Rook Island, where as will be seen later, the stone-using immigrants have left distinct traces, KRIEGER records²) "that in olden times an exceedingly big man named "Puru" landed there, but left the island after having taught the languages to the people of the two islands". REINA³) gives us the following more complete record: Once a man called Pura landed on the island of Rook in a canoe similar to those used at present on that island. He brought some children and many fruits. When he landed a few of the fruits fell into the sea, thus giving origin to the useless plants; the other fruits he planted, gave origin to the coconut palm, bananas, taro, etc. He taught the two languages spoken on the island to his children, who are the ancestors of the present population. Pura himself left the island, some time later. According to some of the natives, Pura was white-skinned, according to others he was black. In New Britain, the white man is called "Pura".—From these stories it is clearly evident that Puru or Pura is a megalithic immigrant.

It does not seem improbable in my view that "Puru" and "Panku" are identical. Panku is known by the Kai of the Sattelberg under the name "Pangu". Like Puru of Rook Island, he is a giant. The Kai say that Malengfung, whom they know as the creator of the world and man, created also a giant, the "Old Pangu". His attributes are almost the same as those

1) BAMLER 44 491 f, 525, 547 f. 2) 441 188. 3) 709a 357 f.

of Malengfung himself. Like the body of Malengfung, Panggu's body is also of stone; only the head up to the forehead is of flesh, above it is again stone. Upon his head rests the sky, therefore he must not move since otherwise the sky would fall down. The ships of the Europeans were formerly thought to be the ships of "Old Panggu", which were piloted by his sons. Some old Kai men said that the origin of the story of "Old Panggu" dates from the time when the first ships of the Europeans came to their country¹).

From these records it is apparent that Panku was light-skinned. If the Tami and the Kai of the Sattelberg connect Panku with the white man, this, as has frequently been seen, by no means proves that he was European. I do not think that too much stress should be laid upon the remark of some old Kai men that the story of "Old Panggu" began with the first appearance of European ships in their country. There is but a short step between the mere relating of Panggu to the Europeans and this opinion. It is fantastic to suggest that the name "Kapimolo" is compounded from the word captain; this can neither be proved nor refuted. It seems naïve to suppose, as BAMLER does, that Panku is recent, and that Ngamet arrived about 1840, simply because in 1887 a landslide on Long Island which was obviously of recent date was attributed to Panku. BAMLER himself records that Panku is held to be responsible for earthquakes, i.e. of course, those of recent date as well as the older ones, so that no chronological conclusion can be drawn from the landslide of Long Island. From the fact that bows and arrows were used as weapons, BAMLER concluded that the ship belonged to a Malayan or a Chinese. We have already rejected BAMLER's suggestion that, since bow and arrow are not longer used in Tami, the Tami myth of Kalomatu who used bows and arrows should be attributed to the area further west where these weapons are actually in use to-day. It has, on the contrary, been seen that Kalomatu was a representative of the stone-using immigrants, whose use of the bow and arrow is a highly characteristic feature all over Melanesia. It could, in my opinion, no more be permitted to consider the white immigrants of the Tami myth as Chinese simply because they used bow and arrow than to conclude, for the same reason, that Kalomatu was a Chinese.

Now, are we able to show that Panku and Ngamet were stone-using immigrants, like Kalomatu and the other characters mentioned? It must first be emphasized that if Panku were as recent as BAMLER has supposed, his assimilation to Anuto and Malengfung would certainly not yet have reached the degree which it has. As regards the hole in the rock where he set his iron pole, it is certain that the mention of an iron pole is recent, but, on the other hand, this in some way reminds one of the footprints or similar traces so frequently left behind by the stone-using immigrants. Panku

1) KEYSER 428 155.

changed himself into a snake with a human head. Now, we have frequently found that the stone-using immigrants took the shape of snakes and of snakes with human heads. Panku changed himself into a hibiscus leaf which, though less frequently, we have nevertheless found in some cases among the sacred plants used by the stone-using immigrants. It is true that Panku has actually none of the features of a culture hero, but it may be that he had such characteristics previously, since this is a quality which would have particularly facilitated his identification with the creators Anuto and Malengfung. If Puru of Rook Island were actually identical with Panku, it would follow with an even greater degree of probability that Panku was a megalithic culture hero, since this is clearly the case as regards Puru. In all cases the characters are sea-faring immigrants, as were the stone-using people. It is highly probable that we are justified in identifying Panku or Panggu with "Pango", whom we have seen to be the culture hero of the Kombe. Pango too had a human head, whereas his body resembled that of a snake. This identification of Panggu and Pango is borne out by the fact that Panggu travelled to the Willaumez Peninsula, west of which are the dwelling places of the Kombe.

It must be admitted that the arguments in favour of Panku being a stone-using immigrant are neither numerous nor very definite, but this, I think, is mainly due to the fact that we know so little about Panku. At all events, these arguments are certainly stronger than those advanced in support of the contention that Panku is a European. If Panku is a light-skinned stone-using immigrant, his use of bow and arrow is quite natural and the fact that Panggu's body is of stone is likewise significant. Moreover, his voyages to Rook Island and the Willaumez Peninsula correspond absolutely to the occurrence of megaliths, stone bowls, and pestles in Rook Island and the islands off the north coast of New Britain; that is to say, Panku's voyages correspond in a high degree to the direction which in this part of Melanesia the migrations of the stone-using immigrants were actually likely to have taken ¹).

The Kai of Cape King William know another being whom they connect with the white man, viz. Nemunemu, the creator of the sky and the earth. Here too, the first steamboats were considered by the natives as the ships of Nemunemu, and even to-day the white men are still called "Nemunemu" ²). The parallel between Nemunemu and Panku is so evident that if BAMLER's reasoning were accepted, one would have to consider

1) Prof. W. KOPPERS draws my attention to the identity of the name Panku with Panku of the Chinese. There too, Panku is the great culture hero, who created the people; like Panggu of the Kai of the Sattelberg and Puru of the Rook Islanders the Chinese Panku is said to have been a giant—he is said to be four times taller than a normal human being—, and after having finished his work he disappeared for good, and was never seen again. In these circumstances the Panku of our Melanesian stories may even be regarded as a "Chinese" but certainly not in the way BAMLER suggested. 2) STOLZ 844 247.

Nemunemu as the first European who came to this country. But it is obvious from the following that this supposition cannot be applied to Nemunemu. STOLZ has pointed out that Nemunemu of the Kai of Cape King William corresponds to the Nemu of the Kai of the Sattelberg. The Nemu are men of olden times who, like Pangu, were created by Malengfung; on the other hand, Malengfung himself is also called Nemu, so that the Nemenemu of the Kai of Cape King William as well as the Nemu of the Kai of the Sattelberg might also be considered as the creators of the world as is Malengfung. The Nemu have no distinct association with the white man, but it is said that they gave the black people black skin and the white people white skin. It is further related that they discovered all the edible fruits, and that they were the first to make gardens and build houses. Of the coconut they ate only the kernel, but threw away the shell, wherefore this is still done to-day. (The myth does not state that they actually introduced the coconut, but this might perhaps be concluded from the way in which the myth relates this incident). In the beginning sleep did not exist, since it was always day. Therefore they created night and then they slept. The Nemu were exterminated by a flood¹).

From this it is evident that the Nemu have at least the following characteristics in common with the stone-using immigrants: They are the introducers of food plants and agriculture, they perhaps also introduced the coconut, and they created night.

Before proceeding to the study of the interior of New Guinea, we shall first continue our investigation on the coast.

Rook Island: On this island a Melanesian language is spoken, but a Papuan language also seems to exist²). The trading relations with West and South New Britain, Siassi, and New Guinea have already been mentioned³), as was also the fact that the island was touched by the light-skinned Panku on his migrations. Racially, the Melanesian type prevails, but Papuan elements occur particularly in the interior of the island. The racial mixture is also evident from the occurrence of concave, convex, and straight noses; the hair is frizzy, but long hair is also frequent and many very light-skinned people are found, so that CHALMERS has called them a "Malay tribe"⁴).

In the village of Barim, outside the men's house there are standing stones "biak" which belong to "men before". Similar stones occur in the bush villages behind Barim. At feast time, the blood of pigs is sprinkled on the stones. It is thought that they guard the village⁵).

Sacred Plants. I am not aware of any use of these plants. From

1) KEYSSER 428 155 f. 2) CHINNERY 146 24, 42, SALERIO 752 342, FRIEDERICI 269 12, 271 90, RAY 704 319. 3) See also: CHALMERS 127 221, PARKINSON 630 54, SALERIO 752 342, 344, VOGEL 911 187, CHINNERY 146 25, 29. 4) CHALMERS 127 222 f, CHINNERY 146 25, 33, SALERIO 752 342, NEUHAUSS 603 128. 5) CHINNERY 603 128.

the neighbouring Sakar Island, KRIEGER¹⁾ records only that yellow "Ziersträucher" are planted near the villages.

Prehistoric objects. On a now uninhabited place in the forest, BAMLER found a number of stone pestles together with numerous potsherds about 10 inches below the surface of the ground. He also found a large number of stone mortars, some of which were very big²⁾.

Mythological evidence. It has previously been seen that Puru who landed on Rook Island, can be considered as a megalithic culture hero, since he is a seafaring immigrant, since he introduced food plants, since he is the creator of the people and their language, since he finally departed from the island and since he is said to be of white skin.

Maclay Coast: The cultures of this long coast which extends from Cape King William to Astrolabe Bay are almost entirely unknown. We know that the languages are Melanesian, although the Papuan speaking tribes, in some cases, live quite near the coast³⁾. Trading relations extend via Sio Island, Siassi, Rook Island, Lugewa Island and Long Island even to New Britain in the east, and westwards they reach as far as Astrolabe Bay⁴⁾. Since, as our further investigation will show, this long coast is unlikely to have been left uninfluenced by the stone-using immigrants, it is very much to be regretted that so little is known about it.

We are only told that it is customary to put branches of variegated coloured plants of the order euphorbia into the armlets and anklets⁵⁾.

Astrolabe Bay: The south coast of this bay is inhabited by the Papuan speaking tribes Kul, Rumba, Bongu, Bogadjim, Male, Kaliko, Tschungum, Maragam, Damun, etc.⁶⁾. The tribes inhabiting the west coast, that is the Bilibili, Jakob, Grager, Siar, Ruo, Seg, Kassub, Guntaba, Kamba, Gregare, Sarang, etc., speak Melanesian languages⁷⁾. The co-existence of two different groups of people has also had an influence on the race⁸⁾. On Dampier Island which also has a Melanesian language⁹⁾ and which culturally is closely connected with Astrolabe Bay, many short people are found¹⁰⁾. Whereas on the coast of the mainland the skin varies from dark to light chocolate colour, it becomes lighter in the mountains of the interior, where the people are "not darker than the lightest Samoans"¹¹⁾. Our present knowledge does not permit us to assume that there has been a mingling of races. It might, however, be added that near Melamu (Constantine

1) 441 128. 2) NEUHAUSS 605 409 f, 606 529, 531, fig. 2, CHINNERY 146 29, *Anthropos* IX, 1914, 1031. 3) NEUHAUSS 603 72, 127 f, RAY 704 319, 321, ZÖLLER 989 364. 4) VOGEL 911 260 f, WERNER 931 77, GROVES 310 45, 47 f, 53 f, 56 f, 58. 5) MIKLUCHO-MACLAY 568 (1876) 297. 6) WERNER 930 49, NEUHAUSS 603 128, RAY 704 319, 321, HAGEN 333 206, FRIEDERICI 272 231, 312. 7) WERNER 930 49, 276, RAY 704 319 f, NEUHAUSS 603 120, 123, 128. 8) WERNER 931 74, NEUHAUSS 603 128, HAGEN 333 159, SCHELLONG 812 73, FINSCH 236 43, BÄSSLER 35 69, 86 etc. 9) NEUHAUSS 603 128, RAY 704 319. 10) THURNWALD 882 154. 11) MACLAY 570 230, FRÖHLICH 276 210.

Haven), SCHELLONG found that "the slavonic type of face prevailed" ¹⁾ and in Mutuka village and the Bunu District opposite Dampier Island, where a Papuan language is spoken ²⁾, some "resemblance to the Malayan type" was noted ³⁾.

The trading relations of the Melanesian Bilibili, who are the most active element in Astrolabe Bay, extend to the east along the whole MacLay Coast and to Rook Island, and seem to exist even with Finsch Haven and Tami. Westwards, trading relations through Dampier Island reach even beyond Hatzfeldt Haven. The trading relations of Dampier Island extend to Malala in the west, Bilibili in the south, and there is some trade with Rich Island ⁴⁾. There are moreover, intensive trading relations between many of the Melanesian and Papuan tribes of Astrolabe Bay ⁵⁾. The Melanesian influence upon the Papuan Bogadjim and Bongu is also evident from the existence of the "Asa" cult of the Bogadjim and the "Ali" cult of the Bongu, which correspond to the Melanesian Balum cult. The use of kava by the Bogadjim, Bongu, and other Papuan tribes is likewise due to such more recent influences.

We have no record of stone-work either from the Melanesian or the Papuan tribes of Astrolabe Bay. It must, however, be mentioned that the Bogadjim, Bongu and some other tribes have big wooden anthropomorphic images called "silum", "telum", or "tselum" which most writers assume to be ancestor figures. Now, MIKLUCHO-MACLAY records that in some of the mountain villages "big stones were worshipped as telum" ⁶⁾. Unfortunately, no detailed description is given of these stones, so that no definite opinion can be formed regarding them. FINSCH ⁷⁾ mentions a carved limestone "tselum" figure 7 inches long, and another 1 foot 2 inches long carved in brown coal, but whether these images are identical with those MIKLUCHO-MACLAY has seen, we do not know, although this seems probable.

Sacred Plants. As in the Balum feast of the Huon Gulf, the Asa dancers of the Bogadjim are decorated with croton and hibiscus; an Asa house and the space round these houses is decorated with dracaena leaves; also other houses and the fences of the gardens were decorated with these leaves, and these leaves were also put into belts, armlets and combs. "Originally I thought them to be only a decoration" says BIRO, "but I found this plant everywhere, even at those places in the vicinity of which it does not grow"; dracaena leaves are also used in medicine ⁸⁾. Between the houses, cordyline, hibiscus, codiaeum, croton, dracaena, and other ornamental shrubs are planted; this is likewise the custom of the neighbouring Bongu and Tschungum Papua. The Melanesian Bilibili fasten "Zierpflanzen" to their

1) 812 73. 2) RAY 704 322. 3) KRIEGER 441 142. 4) KRIEGER 441 224, FINSCH 236 25, KUNZE 447 47, 450 25, 63, 83, 451, 194. 5) WERNER 930 222, 279, BIRO 74 31, 37, 43, 85, 113, 135, FINSCH 236 84 f, 410, 238 11 48, 62, HAGEN 333 206, 216, 242 f, 269, NEUHAUSS 603 243, KRIEGER 441 223 f, etc. etc. 6) FINSCH 236 533 f, HAGEN 333 268. 7) 236 233 f, 257, Pl. 15 fig. 4, 5. 8) BIRO 74 (1901) 195.

dancing spears, and these are also planted by them between the yams; the neighbouring Melanesian Jabob, use the leaves of croton (ringi), cordyline (wobu), and the leaves of the ornamental shrubs ninira, don, talat, and kruaru for sun magic; "Ziersträucher" were found in the villages of the Melanesian Mapono, as well as with the Mirkuk and Peisari inland behind the Jabob. On the Gogol River whose inhabitants LAUTERBACH declares to be immigrants from the coast¹⁾, near the village of Ajuru, former villages now abandoned can be recognized from the ornamental shrubs still found there. In Ajuru, as well as in the neighbouring Jeri village, many articles of trade from Bilibili were found, thus showing that the trading influence of the coast reaches as far as this. On Dampier Island and in Malala, croton branches were exchanged in a peace-making ceremony and planted by both parties. In Malala, dancing women wore croton branches²⁾.

These data show how little we know of the influence of the stone-using immigrants in this region. As there are clear indications of the presence of the stone-using immigrants in the more western islands off the mainland, as well as in the interior of the mainland itself, it is all the more probable that Astrolabe Bay and Dampier Island also have been touched by them. Further investigation on the spot will show whether we are simply confronted here with a lacuna in the information.

Mythological evidence. We are better informed regarding this subject. In the myths of the Bogadjim, Bilibili, and Dampier Island, all the themes which we have come across in the Huon Gulf and whose association with the stone-using immigrants we have shown, appear again very clearly.

The myth of Kelibob and Mandumba is known by the Bogadjim, Bilibili, Siar, and on Dampier Island. The Bogadjim version of this myth runs as follows: Kelibob and Mandumba were brothers; Kelibob was the elder and Mandumba the younger brother. Their occupation was fishing, but they had no canoes. Of yams, taro, and other fruits they were ignorant. Once a woman from the mountains visited them; her arms and legs were as thick as a tree. Kelibob married this woman. This woman shook her arms and legs and a great quantity of yams fell out. Henceforth they ate yams and fish. Mandumba coveted his brother's wife and once, when Kelibob was far away at sea, Mandumba seduced the woman. Kelibob who was busy fishing, suddenly became aware of a bunch of leaves which the current had driven towards him, and the leaves told him that his wife had become unfaithful. Thereupon Kelibob thought of revenge. He decided to build a big men's house and ordered his brother Mandumba to carve some posts. But Mandumba was unskilled in wood carving; so Kelibob felled trees

1) 464 32; some of the Gogol people resemble the Kai. LAUTERBACH 464 20.
2) HAGEN 333 185, 199, LAUTERBACH 463 55, 464 21 f, FINSCH 236 46, 79, DEMFWOLFF 188 69, AUFINGER 28 282-284, WERNER 930 100, 271 f, GEHRMANN 278 2, 6, KUNZE 447 49, 448 44, ROMILLY 739 224, ZÖLLER 989 91, 108.

and on these he carved the scene of the adultery of his brother. Hence the Bogadjim carve these designs on the posts of their houses. When Mandumba saw this he was very frightened, because he realised that his brother Kelibob had discovered his adultery. When digging the holes for the posts, Kelibob ordered his brother to descend into one of them in order to make it deeper. This Mandumba did, but when he was in the hole, Kelibob took a heavy post and with great force drove it into the hole over Mandumba's head. But Mandumba turned his head quickly away and spit the red betel juice which he had in his mouth, high into the air. When he was thus shut up in the hole, a wasp came to his rescue. It bored a long way under the earth, and Mandumba went along this underground way until deep in the forest he came again to the surface of the ground. There, on the headwaters of the little Gileb River, Mandumba began to build a canoe. He was joined by his namesake, the son of Kelibob, and they took all the animals into the canoe. Then a strong wind arose and the canoe was driven down to the sea. But the lashings broke and the canoe sank. Now, the elder Mandumba persuaded his namesake to draw out the sinews and blood vessels of the arms and legs of his mother. This he did, and they were used as lashings; men and women sprang from the cut off ends of these lashings and populated Rich Island, Long Island, and the other islands of the archipelago of the "Zufriedenen Menschen", but they did not go to the mainland. The two Mandumba then went out to sea and from the side of the canoe they threw out a quantity of sand which became an island. Mandumba then brought all the animals and objects from the canoe to the island, built a house and a village, and planted coconuts and other food plants. This island he called Bagabu (Rich Island). Some time later the two Mandumba threw out sand on the outrigger side, and Long Island appeared ¹⁾.

Here we find again all the characteristic features which were found in the Huon Gulf stories, and whose association with the stone-using immigrants we have shown. Again we are confronted with two antagonistic brothers, and there appears once more the same story of adultery with the brother's wife, its discovery in the same manner, the same attempt to kill in a hole; the rescue by the wasp has also its counterpart in the other stories. The canoe building in the interior and the miraculous reaching of the sea, occurred also in the story of Qat of the Banks Islands, and of Lata of Santa Cruz. The theme of the canoe lashings is in some way reminiscent of the Soi story of the Bougainville Straits, the Tokosikuna story of the Trobriands etc. The creation of islands, one of the most characteristic incidents connected with the stone-using immigrants, also appears here again, and Mandumba, as did the many other culture heroes of the stone-using immigrants, introduced coconuts and other food plants. The interpolation in our present Bogadjim version of the theme of the woman who is the real

1) HAGEN 333 281-283, TAPPENBECK 854 57-61, KRIEGER 441 128, 150, 188, HOFFMANN 374 48-50.

creator of the food plants, is not limited to Bogadjim, but occurs in the same way also in the myths of the Tami, Jabim, Kai of the Sattelberg, Graged Island, But District, and further in Kiwai, as will be seen later ¹). But since this theme occurs independently there and is not connected with the story of the culture heroes and in the Kelibob-Mandumba stories of Bilibili and Dampier Island it does not appear at all, it is very probable that its association with the culture heroes in the Bogadjim version is but a later syncretism. It is furthermore very characteristic that Mandumba peopled the eastern islands, and in particular those of the archipelago of the "Zufriedenen Menschen", to which also Rook Island belongs, since in the latter there is clear evidence of the material traces of the megalithic culture.

The Bilibili version of this myth, which agrees with that of the Bogadjim, shows an even greater resemblance to the myths of the Huon Gulf, since the themes of the tattooing of the genitals of the seduced woman and the reuniting of the chips of wood occur here again. According to this version which gives a more detailed record of the migrations of Mandumba (called here Manumbu), Manumbu went first to Dampier Island, then to Rich Island, afterwards founding the numerous villages and islands on the west coast of Astrolabe Bay: Matuka, Erempi, Seg, Siar, Jam, Beliao, Bantibun, Graged, Mitebok, Jakob, Bilibili, Bogadjim, and Bongu. He then travelled along the MacLay Coast where he landed in the village Nom, after which he went to Rook Island, where he remained. This version does not mention that he touched Long Island, but since Long Island is one of the islands which Manumbu created, and to which went the people he had made, it can be inferred that Long Island was also touched on his migrations. The myth continues by relating that Manumbu's people spoke the Dampier Island language, which, however, he changed by magic, so that thereafter they spoke the language of Rook Island. It is furthermore of interest that, according to this version, Manumbu gave the bow to the Seg Island people, and pots to the Jakob and Bilibili, two objects which we have attributed to the stone-using immigrants. It might at once be mentioned, however, that the present Bilibili pottery is not made by the coiling method but by modelling, a method which is certainly Melanesian ²).

In the Bilibili version it is further related that Manumbu "built houses, planted coconut palms,... planted much kava, and many other plants" ³). This is the first time that one of the culture heroes whom we have associated with the stone-using immigrants, is credited with the planting or introducing

1) KEYSER 428 222-225, BAMLER 44 557-559, ZAHN 367 390-394, RESCHKE 713 58, GERSTNER 279 260 f, LANDTMAN 457 73 f. 2) We might add that the Kai of Cape King William also have a myth of two brothers who created the world. The elder created the mainland, and the younger the islands and the sea. The difference in the languages is also attributed to them. The elder is said to have given to his people the bow and the stone club, whereas the younger taught his people to make spears and to burn betel lime. STOLZ 844 247 f. I shall, however, not analyse this story. 3) DEMPWOLFF 188 69 81.

of kava. This statement would seem to confirm RIVERS' opinion that the megalithic people were a part of the "kava-people". We shall, however, refer at greater length to this problem later on¹⁾.

On Dampier Island where, as before-mentioned, the Kelibob and Mandumba myth is also known, Anute or Anutu is furthermore considered as a creator²⁾, corresponding to the creator Anuto of the Jabim and Tami, and the Anutuat of the Siassi. Mandumba (here called Mannube) is said to have created the northern part of New Guinea, Anute the southern part of it, and Kelibob is said to have created the islands and mountains. For his creations, Kelibob used a great bow and an enormous arrow, with which he shot off pieces of the mainland but finally the string of his bow broke and he threw the bow on the mainland whereupon the mountains arose. Also the story of adultery and the ensuing quarrel occurs in this version. Anute, is said to have left his wife Magirpen on an island, and to have married his own sister Kamgi³⁾.

The usual ogre story occurs, with only slight variations, on Dampier Island. This story relates that long ago the giant Kinnim lived on Rich Island. He ate so many people that the rest decided to emigrate. When they left in their canoes, the evil female giant Segagok who was also afraid of Kinnim, asked to go with them but was refused. So she returned to the land where, after some time, she bore two boys. These two first killed certain animals, and then also slew Kinnim. They informed the people of their deed, so the people returned⁴⁾.

The Dampier Island people and the Bogadjim have another myth, according to which men lived formerly in the sky⁵⁾.

1) According to another Bilibili myth, a pig introduced the use of kava. DEMP-WOLFF 188 100 f. 2) BAMLER 44 491, 547. 3) HAGEN 333 285 f, KUNZE 449 74 f; KUNZE 448 69 makes the following remark regarding these myths: "It is remarkable that the name of the god Anute (probably connected with the Dampier word nutun, soul, shadow) can be found almost everywhere in the South Seas, as Atua in Polynesia and Fiji, as Anut, Ani, Hani, and Kalit in Micronesia (Ponape, Palau, Kusaie). The name of the god Kelibob is found in Fiji as Kaluvu, and it is probable that the name Mannube is connected with the creator god Nopu of the Erromonga Islanders (New Hebrides) as well as with the Nopitu vui spirits of Fiji. (See: RATZEL, Völkerkunde). From this it can be concluded that the inhabitants of New Guinea, in so far as these three names of gods (Anute, Kelibob and Mannube) occur with them in any similar form, were once connected with the other South Sea peoples mentioned, so that a long time ago they came from these regions and immigrated to New Guinea". I shall not discuss whether or not these comparisons are justified, or what further examples could be added. Should some of them be right, it would confirm the opinion we have formed from a comparison of the myths of Melanesia, that this set of myths belongs to a culture which has influenced, as no other culture has done, very wide areas of the South Seas. 4) KUNZE 448 107-110, 449 115-118. 5) KUNZE 449 118 f, HAGEN 333 289; the Dampier Island version of this myth which is recorded by KUNZE (449 118 f) agrees verbally with that which KUNZE in 448 110 f records, stating that it comes from Simbang near Finsch Haven. Since also, according to the Rev. VETTER, the Bo-

According to a myth of the Bilibili, a man marries a sky-woman who later, with her child, climbs back to the sky on a rope, which her father lets down ¹⁾. Since also this myth has frequently been found in connection with the stone-using immigrants, it is manifest that not only are we confronted with an occurrence of some isolated themes in this region, but that the whole set of myths of the stone-using immigrants has been introduced here.

Manam Island: On this island, where a Melanesian language is spoken ²⁾ we find an exceedingly mixed people. Some are of Papuan type with dark skin and hooked noses, others have "blunt features often associated with the term "Melanesian", and others have light skin, high cheekbones, straight hair (this is found with nearly fifty per cent of the population), and such a marked epicanthus, that WERNER has envisaged "a mingling with Malayan or even Chinese elements". There is also a great variation in stature ³⁾. One of the existing traditions has it that the first inhabitant of Manam sprang from a place on the mainland not very far south of Aitape, so that "there is good reason to believe that there was in the past an immigration into Manam of a people who had come from the north-west along the coast of New Guinea" ⁴⁾. Another story is telling us that all peoples sprang from the blood of a certain woman of the mainland who was put to death by her sons ⁵⁾. Unfortunately, only very little is known of the myths of Manam, nor is there anything else recorded regarding this woman. We shall, however, come across the same story with the Monumbo Papuans, and there this woman is a culture hero and the mother of two ogre slayers, having thus the characteristics which we have seen to be associated with the stone-using immigrants.

In these circumstances it is of particular interest for us, that WEDGWOOD, who has studied the culture of this island, reaches the following conclusion regarding the history of Manam: "Indeed, all evidence suggests the probability that the people and culture of Manam derive from two main sources: the adjacent mainland, and the western islands of Micronesia" ⁶⁾.

There are very intensive trading relations with the mainland, extending on the coast from the mouth of the Sepik to Budschi village not far from Malala, which latter place we have seen to be the most western limit of the Dampier Island trade. With Bam, the most eastern island of the Schouten Group, there exist only indirect relations via Boisa Island ⁷⁾.

gadjim version agrees with the Dampier version, KUNZE is probably mistaken in locating the myth at Simbang.

1) DEMPWOLFF 188 82-87. 2) PÖCH 667 383 f, 671 150, RAY 704 320, WERNER 930 240-242, 932 5. 3) WEDGWOOD 921 380, 403, WERNER 930 238, 931 78, 81, 932 4, PÖCH 667 383 f, 669 3, 671 150. 4) WEDGWOOD 921 402, 922 1 76. 5) WEDGWOOD 921 402. 6) WEDGWOOD 921 402. 7) WEDGWOOD 921 378 f, 394 f, 922 1 73, 75 f, 924 8 f, 925 144 f, 151, 926 181 f, WERNER 930 265, etc. etc.

In Manam Island, a rite which marks the beginning of the agricultural year is performed on behalf of the entire village. By this the misfortunes and sicknesses of the past year are ceremonially washed away. A man who knows the necessary magic "washes" and paints certain stones. "Only some of the villages possess such stones. Those at Tsokali are quite small and do not appear to be in any way unusual. I was told", says WEDGWOOD "that those belonging to the village of Boda were large. The description given to me suggested that they formed some kind of megalithic stone circle, but unfortunately a series of mishaps prevented me from seeing them, and the informant who told me of them was somewhat given to exaggeration... The men ... deck themselves in their best, thrusting scented sprays of leaves into their armbands and bunches of variegated crotons into their belts" ¹). It is evident that this information is somewhat vague and all the more untrustworthy since stone circles are not definitely recorded from the neighbouring New Guinea. It is nevertheless probable, however, that the stones mentioned were of megalithic character, since on the little island Boesa near Manam, real megaliths have been found. HÖLTKER gives the following description of them ²). "Wir fanden in zwei Dorfflecken ... je einen stehenden Steinstumpfen, von denen der eine wahrscheinlich, der andere sicher früher ein ... Megalith war. Der eine war noch etwa 70 cm hoch und stand inmitten anderer fünf Steine, von denen einer würfelförmig (Seitenlänge etwa 20 cm), drei kleinere kugelförmig (Durchmesser 13,15 und 17 cm) und der letzte ein durchstossener Steinmörser war... Der andere richtige Megalith steht im Dorfe Tanboadi zusammen mit acht flachrundlichen und walzenartigen Steinen... Der Megalith mit rechteckiger Durchschnittsfläche (20,5 cm) ist heute noch etwa 50 cm hoch, hatte aber früher eine Höhe von 150 bis 180 cm; er wurde durch einen umfallenden Baum vor einigen Jahren so kurz abgebrochen. Dieser Megalith ist männlich und heisst basalabia; die übrigen Steine sind Mitglieder seiner Familie und teils männlich, teils weiblich".

Prehistoric objects. It is highly suggestive that the stone mortar was found together with the megalithic stones. Some other stone mortars called kulu patu, i.e. breadfruit stones, found by HÖLTKER on Boesa, were used by the natives in the fertility magic for breadfruit. HÖLTKER found another stone mortar on Manam ³).

Sacred Plants. Nothing more is recorded regarding the ritual use of certain plants; we are only told that "variegated ornamental plants give the village a pleasant appearance" ⁴).

Monumbo: This tribe, inhabiting the mainland opposite Manam Island, is Papuan in race ⁵) and language ⁶). Westwards, trading and culture

1) WEDGWOOD 926 183 f, 921 397. 2) 359a 290, fig. 2. 3) HÖLTKER 395a 289 fig. 1. 4) WERNER 931 78. 5) CHINNERY 146 32, VORMANN 915 408, PÖCH 677 609. 6) NEUHAUSS 603 128, PÖCH 667 383, 677 610, RAY 704 319, 322.

relations reach as far as the mouth of the Sepik, and exist not only with the Papuan tribes of the coast, but also with the Melanesian speaking Tsepa, Bogia, Manam Island, and Dampier Island¹⁾. As an example of these cultural resemblances, attention might be drawn to the fact that certain beings are called "nanaranga"²⁾ which certainly corresponds to the "nanarangs" of Wogeo, and the "morupu" masks of Manam³⁾ are called "murup" by the Monumbo⁴⁾, "môröb" by the Nor Papua⁵⁾, and this word occurs in a similar form at many other places on the coast.

Sacred Plants. We have only scanty and somewhat vague information regarding this subject. The bathing place, where boys and girls must bathe during the initiation ceremonies, is marked and decorated with "Zierpflanzen" which are stuck in the ground there. Certain masks are decorated with ornamental leaves, and several variegated ornamental plants are grown near the houses⁶⁾. In the Papuan speaking Hatzfeldt Haven⁷⁾ west of Budschi, which is within the trade area of the Manam, and whose neighbours, the Dalua, are Monumbo emigrants⁸⁾, ornamental plants, particularly croton (bolo, mbollong), are planted around the houses⁹⁾.

Mythological evidence. The being which set the Monumbo in their present place of habitation and which created all things, is the nanaranga Oberaman. Furthermore, there was a woman whose name was Namitā. She became pregnant from her own big toe and gave birth to two sons called Kaukā and Kaukägewara. She taught them all the customs and crafts such as the building of houses, the making of spears, masks, pots, bowls, etc. These things are still made by the Monumbo to-day in the way she taught them. When the two boys were grown up, their mother ordered them to kill Oberaman, which they did. Then the two brothers beat drums loudly that the people of Manam could hear it. They became curious and went in their canoes to the mainland, but whilst landing they were killed. When their mother Namitā became old she ordered her sons to kill her, to gather up her blood in bamboos and to let it cook on the fire. This they did and when the blood boiled and the bamboos burst, one human being came forth from each of the bamboos; the first was a Monumbo¹⁰⁾.

The peculiarity of this version is the fact that the nanaranga Oberaman is not said to be an ogre but a creator. Since, however, this story agrees with the usual ogre stories in which the creator capacity is never combined with the ogre, it is probable that this is a later interpretation of the story. On the other hand, as will be seen later on, the nanarangs of Wogeo are typical stone-using culture creators. It is therefore evident that in the

1) PÖCH 667 383, 669 4, 9 f, 672 150, 671 141 f, 170, 677 610, RECHE 707 399, 447 f, VORMANN 915 416, 914 414, 416-418, 916 661 f. 2) VORMANN 914 418. 3) See: WEDGWOOD 921 395, 399, 924, 6, 926 (2) 187, WERNER 931 81. 4) VORMANN 914 418 f, 916 667. 5) SCHMIDT 827 332. 6) VORMANN 913 175, 178, 914 426, 916 661, 664. 7) RAY 704 322. 8) VORMANN 915 418. 9) GRABOWSKI 297 189, ZÖLLER 989 407. 10) VORMANN 915 415-417.

present Monumbo story these two conceptions have been confused. It is, however, characteristic, and in agreement with the other analogous stories, that, in the present story, the mother of the hero is at the same time the creator of the culture and the people.

The myth of the two antagonistic brothers, here called Monumbo and Liwowo, the themes of the adultery, the tattooing of the genitals, etc. are also found here, and it is said that the design of this tattooing is still used in carving. The Monumbo version furnishes the following additional information: After the adultery the elder brother gathered all the good things of Monumbo and went away to the west, via the Schouten Islands. On each of them he rested a while. Where he finally settled down is unknown. One of the natives expressed the opinion that these Monumbo people who had left with the best things, have now come back as Europeans. The younger brother Liwowo had no good ships, no good lashings and no good weapons. He left Monumbo very badly equipped. When he was on the sea the outrigger of his canoe broke. At every place where he was forced to halt and to repair the lashings of his canoe, there is now a reef between Monumbo and Hatzfeldt Haven. (From this we may infer that he went in an easterly direction.) What finally became of him nobody can tell¹). In this story of the two antagonistic brothers we are again confronted with the theme of their separation and final departure, the theme of taking away the best things on their departure, and the highly characteristic creation of the reefs.

Wogeo Islands: On this island, as on all the other Schouten Islands, a Melanesian language is spoken which contains, however, also some Papuan elements²). The physical characteristics vary very much; the skin varies between light brown and very dark brown; the eyes are often oblique with epicanthus, but neither straight nor curly hair occurs³). Some types "reminiscent of Malayan" are to be found on the neighbouring Muschu Island⁴) — the first landing place of the Wogeo people on their trading voyages to the mainland⁵), where, with the exception of Sup village, a Papuan language is spoken⁶). On Bam Island, the most easterly of the Schouten Islands, whose indirect relations with Manam have already been pointed out, and whose language is closely related to that of Manam⁷), the proportion of light-skinned people is greater, and the occurrence of epicanthus is also more frequent than in the Western Schouten Islands⁸). Wogeo traditions record the arrival of several canoes from the north but so long ago, that no one living is regarded as the descendant of such an immigrant. On the other hand, a few Admiralty Islands canoes were blown from time to time southwards out of their course to Wogeo⁹), and it is

1) VORMANN 915 417 f. 2) HOGGIN 378 312, FRIEDERICI 269 39, 272 266 f, DEACON 186 349, SCHMIDT 829 117. 3) HOGGIN 378 313. 4) KRIEGER 441 142). 5) HOGGIN 385 396. 6) FRIEDERICI 272 264, RAY 704 322, HOGGIN 385 396. 7) WEDGWOOD 921 378. 8) VOGEL 911 297, RECHE 707 52. 9) HOGGIN 380 142, 151.

not impossible that the tradition of an immigration from the north is based upon the arrival of such canoes blown off from the Admiralty Islands lying to the north-east. It is to be regretted that not more detailed information regarding this question is forthcoming, since we shall find good reason for assuming that the stone-using immigrants migrated from the Admiralty Islands to the south. Very intensive trading relations exist with all the places on the mainland, particularly with the Nor Papua, reaching as far as the Sepik estuary, and it seems that the Nor Papua who act as middlemen, trade Wogeo canarium almonds for miles up the Sepik. Furthermore, there exist reciprocal trading relations between the Schouten Islands themselves ¹⁾).

In every village, several blocks either of basalt or limestone stand upright in the ground amid a rough pavement of smooth boulders. Each one is approximately square in section, the side being 8 to 10 inches long, and from 18 inches to 3 feet in height. In Dap village, for example, there are four stones. These stones, all of which are named, are said to be nanarangs, and they are spoken of as if they actually were the nanarangs themselves. The small boulders forming a pavement around the main stones are said to be the nanarang-helpers. HOGGIN is of opinion that the upright stones are in reality ancient grave stones and that the pavements are ancient cemeteries. Bodies are still occasionally buried close by, and smaller flat stones are afterwards laid on top, though the more usual place of burial to-day is beneath the house ²⁾).

Sacred Plants. At ceremonial presentations of food, pigs are arranged in a line decked with croton leaves. Uprights of fences are often made of cordyline, although these are very flimsy and can be broken with the fingers. Many people go so far as to decorate their gardens, reducing the area in the process, by planting clumps of flowers, especially the scarlet blossomed kamasia, crotons and other shrubs. HOGGIN was told that the aim was merely to make the plots look well. After the log for a canoe has been charred, large quantities of dracaenas, crotons and other plants are collected. Both the men and the women decorate themselves with these, and then a dance takes place. The songs of these dances are called "spells", since they are believed to produce magical effects, and that if they were not sung the canoe would not sail well. A number of ornamental leaves and herbs are used in magic to enhance beauty, and hibiscus is used in magic against the drifting of a canoe ³⁾).

Mythological evidence. We must now ask, who are the nanarangs, who are said to be responsible for the megalithic stone-work of Wogeo Island, and who, as we have said, were represented by monoliths.

1) HOGGIN 378 310, 320, 381 133-135, 313, 385 376 f, 392, 396-399, 401-440, SCHMIDT 826 713, 715, 723, 827 674 ff. 2) HOGGIN 380 158-160, Pl. Ia, Map p. 128, 385 378, 378 Pl. IIA, 379 172 f, Pl. IIA. 3) HOGGIN 378 320, 381 146, 302, 385 383, 393, 395.

The nanarangs are beings who lived long ago, but do not exist any longer¹). In the beginning, the island had a population consisting solely of nanarangs. Several of these took their canoes and sailed away, eventually changing themselves into new islands; thus the mainland of New Guinea is the spine of one Wogeo nanarang; the island of Koil the hand of another; the volcano of Manam, the head of a third. The nanarangs left behind originated all local customs, including magic and every object the natives use, and in this way are responsible for the Wogeo culture. Two of them, a male and female, lived together for the first time, thus founding the institution of marriage, another built the first men's house, a third shaped the first fishhooks, others discovered the first flutes, etc. When, later, humans took possession of their culture, the nanarangs disappeared. But before they vanished they caused the rest of the world to be peopled, some say by creating the ancestors of the present inhabitants of each place separately, and others by sending forth the early residents of Wogeo to establish settlements. These nanarangs are also marked off as a class by the type of relics they have left behind, such as big boulders, supposed to be their homes turned into stone; depressions on rock surfaces representing their footprints; streams caused by their tears; and so forth. They moulded the island Wogeo into its present shape²).

From this it is evident that these stone-using nanarangs have all the characteristics which we have learned to be associated with the other stone-using immigrants of Melanesia: They are a sea-faring people; they are culture heroes. The foundation of marriage, and the building of the first men's house are very characteristic incidents; in the same way, Ambat built a men's house and by living with his wife, founded the institution of marriage, and the same has been recorded of some of the other stone-using heroes. The nanarangs left their footprints behind as did many of the stone-using immigrants; they are physiographical shapers and creators of islands, and they finally departed. As it is said that some of the nanarangs, who sailed away, changed themselves into New Guinea, Koil, and Manam, we can definitely accept this as a sure indication that these places were touched by them on their migrations. On the other hand, it is significant that this region is likewise within the area covered by the westward migration of the culture hero Monumbo.

If further proof were needed that the nanarangs are actually identical with our stone-using immigrants, this proof is furnished by the following story: The nanarang who founded Dap village, is Mafofo. Having decided to visit the mainland, he cut down a tree and constructed the first overseas canoe. In so doing he started all future expeditions to the mainland. The stone

1) Besides these, there is also another kind of nanarangs, still living, who make storms, cause sickness, and have all the attributes of evil spirits. HOGGIN 380 150 f. They are of no interest to us in this study. 2) HOGGIN 380 151-153, 156-160, 378 328, 330, 333.

which commemorates Mafofo stands in the village. The story then goes on to relate that while Mafofo was away he left his wife with a friend, Wonka, but that he dreamed that she was unfaithful to him. He returned and proceeded first to test whether the dream was true, and then to take vengeance on the disloyal friend. The story also explains the origin of one of the ornamental designs carved on overseas canoes and other objects. Wonka is said to have tattooed it on Mafofo's wife ¹⁾. The starting by the stone-using immigrant Mafofo of the very intensive trading expeditions to the mainland equates him with Samudulele who started the long overseas expeditions of Mailu, with Keaura of Motu who started the hiri voyages, and with Gere'u of the Trobriand Islands who started the Kula. Since all these characters were found to be representatives of the stone-using immigrants, this is surely proof enough for maintaining that it was the stone-using immigrants who founded these big trading expeditions in Melanesia. The theme of the adultery and the tattooing of the genitals of the seduced woman appear here again in connection with the stone-using immigrant Mafofo and, as in the other stories, it is again said that these patterns have given origin to the present ornamental designs used in carving.

Thus the north coast of New Guinea, where, at some places these mythological themes are to be found without any material traces of the stone-using immigrants, furnishes an additional proof of the genetic connection of these themes with the culture of the stone-using immigrants. It is furthermore remarkable that Mafofo's canoe bears the name Urem Tariga, since Tariga is the fish-hawk ²⁾ so frequently associated with the stone-using immigrants. That "tariga" is identical with the "taragau" of the Bismarck Archipelago is further confirmed by the fact that on Manam Island there is a certain dance "associated with the taragau or fish-hawk" ³⁾.

The North coast of the Mandated Territory as far as the Dutch Boundary.

Further westward towards the boundary of the Mandated Territory, light skinned elements are found among the Tumleo, whose skin varies from very light to almost black ⁴⁾, and in the former Berlin Haven it varies from yellow brown to dark brown. The hair is frizzy and the nose hooked, and there do not seem to be any wavy-haired individuals ⁵⁾. In Angiel near Aitape, the skin varies from light to dark and wavy hair is not uncommon ⁶⁾. The languages of all these tribes are Melanesian ⁷⁾. The Vanimo (inhabiting the former Angriffshafen) which live near the boundary, speak a Papuan language ⁸⁾. FINSCH ⁹⁾ calls them "Echte Papuas", but dark brown skin as well as lighter skin occurs and they are even paler than their neighbours; the hair is woolly and the nose is hooked ¹⁰⁾. Several writers have

1) HOGGIN 379 270, 385 378 f. 2) HOGGIN 385 382. 3) WEDGWOOD 921 398.
4) ERDWEG 229 277. 5) PARKINSON 635 24, SCHMIDT 830 16. 6) CHINNERY 146 47.
7) PÖCH 666 233, FRIEDERICI 269 36, 272 264, RAY 704 319, NEUHAUSS 603 128, SCHMIDT 830 18 f, GRAEBNER 298 746. 8) RAY 704 323, CHINNERY 146 51, FRIEDERICI 269 36.
9) 236 339. 10) CHINNERY 146 49, MARSHALL 534 499.

suggested that the occurrence of these light-skinned elements can be explained by the influence of Malayan traders who came to these coasts¹). To this I have to object that there is very little reliable information regarding the voyages of early Malayan traders, or the extent of these voyages; in the more western coastal regions of Dutch New Guinea where one would naturally expect this influence to be much stronger, there is in fact very little trace of this Malayan influence. It will be seen later that this influence is not perceptible until much farther to the west. Since, on the other hand, the mythology of the stone-using immigrants exists on this coast, and stone-work occurs on Lake Sentani, it is more natural to conclude that the light-skinned elements in this part of New Guinea are due to the influence of the stone-using immigrants. It is probable that the stone-using immigrants went from the Schouten Islands over to the mainland, moving on in a westerly direction. It is of course possible that some recent Malayan influences were at work here and there, but information is lacking on this point. A somewhat similar opinion is expressed by MARSHALL²). Basing himself upon the opinion of HADDON who maintained that the Polynesian invaders were skirting the northern coast of New Guinea, MARSHALL believes that the light skin of some of the Vanimo and on the other islands off the mainland, can be explained by this Polynesian influence.

In the east, Bertrand Island and Guilbert Island hold all the intensive trade between the Schouten Islands and Berlin Haven. Berlin Haven is the trading centre in the west, and their trading relations extend over the Vanimo as far as Humboldt Bay. Trading relations have brought about strong cultural resemblances, and in his "Berlin Haven Section" PARKINSON has included both Bertrand Island and Guilbert Island. Between the coastal tribes from Murik to the west, there are furthermore many trading relations within short distances. A contact is thus created between the Schouten Islands in the east and Humboldt Bay in the west³).

No traces of stone-work are recorded from the eastern part of this long coast of the Mandated Territory.

Sacred Plants. The following is recorded regarding the use of sacred plants: In the But District, where the language spoken is Papuan⁴), in magic for yams the ornamental shrubs at'us, salubiz, gunum, gawal, and yaug are used either by putting them into the ground, or by beating the yams with them. In sorcery also "Ziergräser" are used. The botanical names of these plants are unfortunately not given. In Paup, where a Melanesian language with some Papuan elements is spoken⁵), the boundary between two villages is marked by ornamental plants, as is also the case in the nearby

1) BLUM 84 21, PARKINSON 635 20 f, 28, SCHMIDT 830 16. 2) 534 499. 3) GERSTNER 279 253, SCHMIDT 831 87, 830 18, SCHLAGINHAUFEN 814 9, NEUHAUSS 603 289 f, 367 f, ERDWEG 229 340 f, 343, 345 f, 356 f, 359, 363, 230 101 f, PARKINSON 635 19 f, 26, 32, 40, etc. etc. 4) FRIEDERICI 272 RAY 704 322. 5) NEUHAUSS 603 129, FRIEDERICI 269 36.

village of Poro which belongs to the Walman, where a Papuan language is spoken ¹⁾. On Tumleo Island where a Melanesian language is spoken ²⁾, ornamental plants are often grown in gardens ³⁾. There is a great deal of information regarding the use of sacred plants in the Berlin Haven region of the Aitape District, where a Melanesian language is spoken. "Wunekau Ziersträucher" are fastened to the seat of a canoe setting out on its first voyage, and Wunekau is called upon to protect the canoe; the axe with which a canoe is made is rubbed with this "Wunekau Kraut"; when the mast of the canoe is made, "variegated ornamental plants" are burnt "in connection with Wunekau or Parak or some other spirit"; when a house is roofed, the priest ascends to the roof, ceremonially sweeps the roof with a "manup" branch, and calls upon Wunekau (Jakumul) ⁴⁾; a sick person is struck with a manup branch, and at the same time Wunekau is called upon; when Wunekau is invoked a branch of the manup plant with red leaves is often held before the mouth and Wunekau is called upon through this plant; the manup plant is further used for decoration purposes and as a token of peace (Suein). This plant is "particularly associated with Wunekau and Parak" and is "sacred particularly to Wunekau"; in the gardens it is planted before the other plants are set. To delay the decomposition of a corpse, a certain bark and the ornamental plant tjeng, "which is sacred to Wunekau", are held before the mouth, Wunekau is called upon, and through these plants the corpse is breathed upon and touched with them. A certain kind of coconut palm with red nuts is sacred to Wunekau in the Aitape and But Districts. In the Aitape District sacrifices are offered to Wunekau and in many cases the altar is at the foot of a casuarina ⁵⁾. This clear association with Wunekau of a number of ornamental plants the botanical names of which are, however, not recorded, and his association with the coconut palm and the casuarina, is of the utmost importance, since we shall be able to show Wunekau to be a representative of the stone-using immigrants.

The inhabitants of the Torricelli Mountains speak a Papuan language, are of short stature and have dark brown skin ⁶⁾. Old trading relations exist with the coast, and a good native trade route crosses the plain south of Aitape and passes over the Torricelli Range into the interior ⁷⁾. SPEISER ⁸⁾ actually includes the people of the Torricelli Range among the group of the Papuo-Melanesians.

The people south of the Wapei wear croton leaves in the armlets. In the

1) SCHLAGINHAUFEN 814 9, NEUHAUSS 503 129. 2) SCHMIDT 830 19 f, NEUHAUSS 603 128, RAY 704 319, FRIEDERICI 269 36. 3) GERSTNER 279 249, 254-257, SCHLAGINHAUFEN 814 16, ERDWEG 229 326. 4) The Jakumul have a Melanesian language with Papuan elements. NEUHAUSS 603 129, FRIEDERICI 269 36. 5) MEYER 561 39, 829 f, 836, 840 f, 843, 845, 847 f, 850 f, GERSTNER 279 252. 6) SCHLAGINHAUFEN 814 12 f, 820 5 f, MARSHALL 534 492, NEUHAUSS 603 129. 7) CHEESMAN 141 169, MARSHALL 534 492, 501. 8) 797 141.

gardens and around the houses many shrubs and flowers of an astonishing diversity "obviously not of local origin" were planted¹⁾.

In Sissano on the coast, where a Melanesian language is spoken²⁾, a certain red-leaved shrub is planted upon graves, and is only removed when the dead man is avenged³⁾.

Mythological evidence. The myth of the two Wunekau brothers is known in many places along the northern coast. They appear under very different names in various places. In the Aitape District they are called the Wunekau brothers, on Tumleo and Ali they bear the names Pisil (for the elder) and Tanawau (for the younger); in Ulau (Wolau) and Suein, where a Melanesian language is spoken⁴⁾ they are called Pisin and Tenal; according to another Suein version they are called Saieliu and Naieliu, and in Jakumul they are called Kaiarar and Alevoetung. In Aitape, Tumleo, Ali, Jakumul, and Ulau they are the sons of a snake, who kill their human father, because he had killed their snake mother. According to another version of Suein and Ulau, they are the sons (grand-children or great grand-children) of the woman Sagomai, who is described as a creator and the founder of the Parak. Wunekau is further known in the But District, Dallmann Haven and some of the Schouten Islands⁵⁾. According to the Aitape version, after the death of their father, the two brothers went out into the world, the elder brother to the east, the younger to the west. According to the Tumleo version, a quarrel broke out between the two brothers when they were on the mainland opposite Tumleo Island. They had different weapons and different kinds of decorations. The elder brother had the spear, and the younger used the bow with bamboo arrows. According to some stories, the elder brother, who went eastwards, was of very high stature and white-skinned like the white man; but the younger brother, who went westwards, is said to have been dark-skinned. Near the present Raju River on the mainland opposite Tumleo, they made a furrow near the sea with a wooden sword, thus creating the river. Henceforth they were separated by this river. The wooden sword they put into the sea at the mouth of the river, and it changed into a rock which still exists. Then they continued on their way, the elder eastwards, and the younger westwards. On their voyage the two brothers are said to have made all the rivers; they are the culture bringers; the elder brother gave the eastern tribes weapons, ornaments, his singsing, the Parak system, etc. From Tumleo to the west the younger brother introduced his weapons, his ornaments, his singsing, etc. Therefore the eastern tribes have the spear, but the western have bow and arrow; and the singsings, ornaments, parak, etc. of the eastern and western tribes consequently differ. Whereas formerly Parak ate men, the Wunekau brothers ordered him henceforth to eat pigs but not men. It is often

1) MARSHALL 534 497, 501. 2) NEUHAUSS 603 66, 129, FRIEDERICI 269 36 f.
3) NEUHAUSS 603 168. 4) NEUHAUSS 603 129, MEYER 561 425. 5) MEYER 561 819, GERSTNER 279 252.

said by the natives that first the two brothers created the culture of the black people, after which they went to the north, and visited the white man whose culture they also created.

In the analogous version of Ulau and Suein the brothers bear the names Tenal and Pisin; in some stories Tenal-Pisin seems to be one person only who came from the west and went to the east, after which he returned again to the west; but other informants said that Tenal-Pisin were two brothers and that Pisin, the elder, went to the east, and Tenal, the younger to the west. The same uncertainty exists also regarding Wunekau himself. At the time of his first sojourn with the natives, MEYER heard only of one Wunekau who came from the east and went to the west; not until much later was he told that in reality there were two Wunekau brothers. This in some way is reminiscent of the inconsistency which has also been encountered in the case of Ambat of Malekula, who in some versions, seemed to be a single person whereas in others Ambat was a group of brothers. Tenal-Pisin, according to the stories which describe him as one person, is a being of great power; his home is in the west, in Serra or Leite. He was also white-skinned. From the west he went to the east, as far as the Sepik and even farther. He gave his goods to all the people living in the districts through which he passed, as for instance, weapons, ornaments, plantations, singsings, Parak, etc. The introduction of bananas, vegetables and bread-fruit are attributed to him. Tenal-Pisin returned from the east, and on his way westward he distributed sago on the Sepik, in Matapau, Suein, Ulau, Jakumul, Malol-Arop and Sissano¹).

According to a myth of Ulau, Jakumul, and Suein, a being called Pakuk is said to have created everything, including the sago and the Parak²). The Nor Papua know a being called Jabar, who created everything, and a man Kaboaruruk is credited with the creation of all the islands³), but nothing more is recorded about these beings.

P. O. MEYER, to whom we owe most of the information regarding the Wunekau brothers, has taken great pain to show "that in reality the elder Wunekau brother is the sun, and the younger brother in the west, the moon"; thus in some places the word meaning "sun" is occasionally used to designate Wunekau, but MEYER himself adds: "Der Name Wunekau kam wohl später zum Namen für "Sonne" hinzu"; the younger brother, according to his reasoning, is the moon, because he brought the bow, "since the bent bow is in some way the symbol of the moon, particularly of its first or last quarter". Also Tenal-Pisin, who introduced the sago and, according to one version, was himself sago, is in MEYER's judgment associated with the moon, "since he was white and bright like sago, and in the Aitape District the sago has some relation to the moon; according to the myth of the origin of the moon, the moon was formerly light bright

1) MEYER 561 32, 427, 432-434, 439 f, 447 f, 452, 850-853. 2) MEYER 561 441-446.
3) SCHMIDT 826 61, 727.

sago which, by the sun or Wunekau, was taken to the sky and installed as moon" ¹). P. W. SCHMIDT has considered "Wonekau" of the Schouten Island Karesau, as a "Supreme Being" ²).

Now, for reasons which we shall set forth presently, Wunekau is neither a "Supreme Being", nor a sun-god, nor a moon-god, but a representative of the stone-using immigrants. It certainly cannot be denied that the sun and the moon are considered of some importance in this coastal region, and we shall discuss this problem later at greater length. It will, however, be seen that in West New Guinea, i.e. the very area where no trace of the stone-using immigrants is to be found, a certain importance is attached to the sun and moon. Some associations with the sun and moon are to be found also in an analogous myth of the Admiralty Islands. It is therefore quite possible that the Wunekau brothers were in some way connected with the heavenly bodies, but this does not solve the question whether this association is of a primary or secondary nature. It must moreover be borne in mind that most of the analogous myths in Melanesia make no mention of any association with the heavenly bodies. We shall revert to this problem later on.

MEYER himself records that the Wunekau myths originally came from the east, viz. from the Schouten Islands Koil and Wogeo. It is said that the two Wunekau brothers fought there; the elder defeated the younger, who then went to the west ³). MEYER does not say why they quarrelled, but since the story of the Wunekau brothers corresponds in all essentials to the stories of the two antagonistic brothers of the stone-using immigrants, in which adultery with the brother's wife is the cause of the separation of the brothers, it is natural to infer that this was also so in the case of the Wunekau brothers. This account of adultery has actually been found in Wogeo in the story of the stone-using nanarang Mafoko and his "friend" Wonka, and I have no doubt whatever that the adulterer "Wonka" of Wogeo is none other than "Wonekau" of the neighbouring Karesau Island, and Wunekau of the western coastal districts. Furthermore, a Tumleo myth relates the quarrel of two brothers caused by the adultery of one of the brothers with the wife of the other. During a fishing expedition together, the deceived brother in revenge sets the adulterer on a drifting tree and goes away in his canoe. The adulterer brother is picked up by a drifting reef, and brought back to Tumleo, where the brothers fight again, but neither is victorious. Henceforth the Ataleo reef lies on the west side of Tumleo; two holes in this reef are said to be the footprints of the adulterer brother ⁴). Although a few details of this story differ from the analogous stories of adultery of the antagonistic brothers, it is, however, significant

1) MEYER 561 27 f, 34-38, 45, 427, 440 f, 820, 835. It might, however, be added that in the Tumleo version of this myth it is "the spirit of the Evil Woman" which carries the moon to the sky. SCHULTZE 840 41. 2) SCHMIDT 829 118, 833 1056 Note 1, see also GERSTNER 279 249 Note 10. 3) MEYER 561 425, 819. 4) SCHULTZE 840 49-53.

that the origin of the reef, or at least its position, is associated with one of these brothers, and it is furthermore remarkable that the theme of the footprints left behind by almost every stone-using hero in Melanesia, also appears again. It cannot, as far as I can see, be definitely shown that these two brothers are identical with the two Wunekau brothers, but this story shows nevertheless that in this area too, the theme of adultery belongs probably to the set of myths of the stone-using immigrants. Besides this theme of the quarrel, causing the brothers' separation,—a typical incident with the antagonistic stone-using brothers—the Wunekau brothers have the following characteristics of the stone-using immigrants: They are culture heroes who introduced many things and particularly many food plants, and they are physiographical shapers. (It is a significant detail that in creating the river which was to separate them they used a wooden sword. In the same way, in the analogous story of Taurama and Keaura of Motu, Taurama struck two hills asunder with a wooden sword.) It is furthermore significant that, according to several versions, their mother is a snake which had been slain, since this agrees with the numerous snake stories of the stone-using immigrants. Not only does the association with Europeans appear here again, but the brother who wanders eastwards is expressly said to be light-skinned, like the many other stone-using immigrants; and that the brothers went to the Europeans, shows that finally they departed from the world known to the natives, like almost all the other stone-using culture heroes of Melanesia.

The following data will show that not only does the story of the antagonistic brothers occur in this region, but also many other themes belonging to the great cycle of myths of the stone-using immigrants.

According to an Ali Island myth, there was once a spring on the island which contained sea water. This spring belonged to Wunekau and had also been made by him. Once a child wished to see the spring; his grandmother, giving in to his continual entreaties, showed it to him. This made Wunekau very angry, and the water in the spring began to rise until the sea was created¹). This myth shows that Wunekau was the proprietor and the maker of the spring from which he created the sea. In this he agrees with many other stone-using culture heroes of Melanesia whom we have likewise seen to be the proprietors of the springs from which the sea originated, or who were closely associated with the often recurring woman who created the sea from this spring or in some other way. The following myth of the neighbouring Tumbleo, agrees more with this latter version. It runs as follows: A woman called Irigian had two sons whose names were Buguti and Bugatai. This woman, who had the gift of changing herself into a cassowary, caused several villages to spring up out of nothing. Once she cut her finger with a leaf and let the blood drip into a taro leaf; with this blood she prepared her food which now tasted salty. When the two brothers

1) MEYER 561 431.

discovered her secret, they scolded her. Then they made paddles and with these they parted the blood. In doing so the blood rose, became of blue-white colour, and gushed in mighty waves into the plain; thus the sea originated. Buguti, the elder brother, sat upon his paddle and let it drift on the flood eastwards as far as Murik. Bugatai, the younger brother, did the same, but he was driven far to the west. He landed on a small reef between Aitape Point and Tumleo Island. Every time the two brothers turned their heads during their voyage, a new island arose in the water. Thus the origin of the following islands can be explained: Tumleo, Ali, Seleu, and Angiel in the Aitape District; the two islands near But: Walis and Tarawain; the islands Juo, Karesau, Unai, Kairiru, and Muschu in the Boikin District. From Murik, Buguti sent a canoe to the west richly laden with presents such as armlets, little purses, and mats, to inform his brother that he was still alive. Some time later the same canoe came back with other presents such as rings, pots, feather decorations, which Bugatai had sent; and very soon they were able to visit each other¹⁾. These two brothers undoubtedly agree in their respective migrations to the east and the west, and in their creation of islands, with the Wunekau brothers, and it may be that they are identical with them, although appearing under different names. It is very probable that by the exchange of presents and their reciprocal visits the myth wishes it to be understood that these two brothers were responsible for starting the trading relations between the two parts of the coast, relations, which are still very intensive. If this be true, it would equate these two brothers with the stone-using immigrants Mafofo of Wogeo, Samudulele of Mailu, Keaura of Motu and Gere'u of the Trobriand Islands who were the founders of the great overseas trading expeditions.

Humboldt Bay: Continuing our investigation into Dutch New Guinea, still further west along the coast, we come to Humboldt Bay. In race²⁾ and language³⁾ the Papuan type prevails among the tribes west of the Dutch boundary.

On the coast of Humboldt Bay where Melanesian languages with more or less Papuan elements are spoken⁴⁾, the skin varies from light to dark brown, and the hair is frizzy. POWELL's remark that the people were "of Malayan type" is contested by FINSCH who declares them to be "pure Papuans"⁵⁾. Some of the earlier writers have clearly pointed out that neither the traders of Tidore nor those of Ceram nor any other Malayan traders have ever been able to extend their trading voyages as far as Humboldt Bay⁶⁾. The trading relations of the Tobadi people who are the most

1) GERSTNER 284 487 f. 2) SCHULTZE 839 10 f. 3) FRIEDERICI 269, 36, 272 257-259, RAY 704 323. 4) V. D. SANDE 753 326, FRIEDERICI 269 19, RAY 704 320, MEYER 558 74. 5) FINSCH 236 351, 242a 137, V. D. AA 11 270, MÜLLER 593 24-27, KONING 435 251; 2 196. 6) ROSENBERG 743 345, MÜLLER 593 1, 3, 7 f, FINSCH 242a 133. LORENTZ 501 28 mentions, however, Ternate traders who come to this region.

active traders on the coast, extend as far east as Berlin Haven, the reciprocal trading relations of which with Humboldt Bay have already been mentioned. Inland, the trading relations of the Tobadi extend particularly to the Sentani people, and westwards they reach as far as Jamna Island¹).

No stone-work, no prehistoric remains, and no mythological themes are found to indicate the presence of the stone-using immigrants. Croton is worn in the hair, and casuarina, evodia, dracaena, cordyline terminalis, codiaeum variegatum, etc. are also found²), but there is no record of any ritual use of these plants.

Lake Sentani: The Sentani people, who live farther inland, are racially related to the Humboldt Bay people³), but speak a Papuan language⁴). Besides the trading relations with Humboldt Bay, they trade with Tanah-Merah Bay via the Cyclops Mountains and also with the interior. In general, however, the influence of the coast is relatively but little felt⁵).

On the now uninhabited hills of several little islands in Lake Sentani, WIRZ found some large and some smaller oblong stones. Some of these stones were obviously worked whilst others were not. Both were of an elongated shape but the unworked stones were of less regular form. Big stone slabs were also found. On Ifar Island, WIRZ found seven of these stones on the highest hill, which was covered with grass and shrubs. The two largest of these stones were 384 cm and 370 cm long, 70 cm and 24 cm broad, and 24 cm and 17 cm thick; two others were 307 cm and 296 cm long, and 59 cm and 20 cm broad respectively. Some of these stones had been brought down to the shore by the people at an apparently fairly recent date, where they used them as piles for their houses standing in the water. It was impossible to recognize any definite orientation of these stones on the hills, and they were in fact dispersed in an irregular manner all over the hills. They consisted of diabas, which is found in this region. It is remarkable that these stones which WIRZ considers to be monoliths, were found only on Ifar and some of its neighbouring islands, but not on the other islands or in the villages of the mainland. These monoliths are considered as "uaropo" (spirits) and every stone bears the name of a particular uaropo⁶). With regard to the origin of these megaliths, the natives said

1) SCHULTZE 839 14, 16, LORENTZ 501 35 f, 96, 112, v. D. SANDE 753 179, 216, 220, 268, 277, 310 f, KONING 435 264 f, 269, 436 595, KRIEGER 441 432 etc. 2) KONING 435 254, WICHMANN 938 151, 312-314. 3) WIRZ 967 2, KONING 435 272. 4) WOLLASTON 976 325, WIRZ 966 254, 267, WICHMANN 938 167 f Note 4. 5) CHEESMAN 140 29, WIRZ 971 68 f, 71, WICHMANN 938 174 Note 1, LORENTZ 501 52, v. D. SANDE 753 52, 108, 216 f; 3 826. 6) The stones used in magic are also called "uaropo"; some of the megaliths mentioned are used in magic too. It has already been mentioned that the use of stones in magic has nothing to do with megaliths, but is characteristic of the Papuan culture. It is therefore probable that magical practices have subsequently been applied to some of these megaliths, with which originally they had no connection whatever. It is therefore significant that, according to the information of WIRZ, this use of megaliths for magical purposes is somewhat rare.

that they either fell from the sky or came out of the ground. But it is said also that many of the small stones used in magic, which have nothing to do with megaliths, fell from the sky or came out of the ground, so that it is not possible to definitely associate either of these traditions with the one or other kind of stones. In Ayafo there is a big circular stone slab, which is said to harbour a pig-uaropo. From WIRZ's description it is not certain whether this stone can be considered as a megalith, but a tradition relates that the people of Fanim brought this stone first to Osei and then to Ayafo, when, following a big snake, they migrated to Lake Sentani¹).

Sacred Plants. In a certain rite intending to further growth, children are besprinkled with a croton branch; a sick person must drink a concoction prepared from the leaves of the croton variety "mosou"; an aching part of the body is rubbed with a croton or other variegated leaves; a corpse is decorated with croton or other ornamental shrubs; during the filling in of a grave, a few old women shake croton branches "to express their grief" says WIRZ. The filled-in grave is also decorated with croton branches. After a case of death, the relatives are rubbed with dracaena leaves, whereupon they must bathe in order to remove the evil influence of the dead. It is definitely enjoined upon the novices to wear, during their initiation, croton branches in their armlets; and on other occasions croton and dracaena leaves are put into the armlets as ornaments²).

Prehistoric objects. In Puyo, WIRZ found a small mushroom-shaped stone with designs carved on its rounded surface. The stone, the origin of which was unknown and which was used in magic, was regarded by the natives as an uaropo. WIRZ expresses the opinion that this was a potter's stone³), but this is not proved and seems very improbable. Many of the small stones used in magic were believed to have fallen in a pot from the sky. These stones are therefore often kept in pots to-day. In some cases the pots which fell from the sky did not break, but in other cases they did, which, according to the natives, explains the existence of old pots and potsherds found in their region. Both the pots and potsherds are kept in a small hut near the village, and the unbroken pots as well as the potsherds are called uaropo; every potsherd has its own name, and the natives avoid touching them⁴). Unfortunately, WIRZ gives no further information regarding these pots and potsherds, nor has he published any pictures of them, so that we do not know whether there is any difference between the shape, size, and decoration of this pottery, and particularly the method by which it was made, and the present pottery which is made by modelling⁵). In these circumstances it is impossible to determine whether we are confronted here with "prehistoric" pottery or not.

1) WIRZ 966 304-323, Pl. XXVI fig. 9, 10, 12, Pl. XXVII fig. 11, 13, Pl. XXIX fig. 16, 971 76, 967 2 f, 972 56-58, fig. 107-112. 2) WIRZ 965 27, 50, 966 289, 294-296, 320, 328 f, 967 76. 3) 966 321 f, fig. 1. 4) WIRZ 966 307, 316, 320 f, 971 75 f, 967 26 f, 972 58. 5) WIRZ 966 277 f, 967 74, 972 19, fig. 53, WICHMANN 938 236, SCHURIG 841 82.

Mythological evidence. With regard to stones used in magic, megaliths, and old pots and potsherds we have seen that the natives believed these had fallen from the sky, and that some of the magic stones and megaliths were said to have come from the ground¹). These traditions are borne out by the fact that part of the present population believe it descends from people who came down from the sky, whereas others consider a people who came out of the ground to be their ancestors. Wirz specifies the islands and villages which consider themselves as belonging to the one or the other group²), but his information is somewhat inconsistent, and it is therefore not possible to connect definitely either of these groups of the present population with the people which we must consider as representatives of the stone-using immigrants. It is significant, however, that, in this region where clear traces of the stone-using immigrants are discernible, this tradition of sky-people appears again, a people, which in the other parts of Melanesia we have frequently learned to be stone-using immigrants.

The myth goes on to relate that, originally, neither the sky-people nor those who came out of the ground had any knowledge of agriculture or the building of houses. An old woman named Gragoi who came to them from Yambuee (east of Humboldt Bay), brought them the coconut palm and the sago palm, and taught them agriculture and the building of houses, after which she returned to Yambuee and retired there into the earth³). No other deeds characteristic of the stone-using immigrants are recorded of this woman, nor is anything else known about her.

According to another tradition, the inhabitants of Osei and Ayafo, as well as some of the other people of the eastern part and the extreme west of the lake, belong neither to those who came down from the sky nor to the others who came out of the earth; their home is said to be somewhere in the east, in the vicinity of the Dutch boundary, on a mountain called Fanim. There long ago their ancestors lived. One day, the chief's son named Taimi who was held in contempt by all the people, happened to meet in the bush a powerful snake called Yabero, which brought him on its back to Lake Sentani in the west. The way led through Oinake, over the Tami River, to Sae, Mabo, Yambuee, Humboldt Bay, Nafri, and finally Lake Sentani. The people followed the snake and thus reached Osei Island, where they

1) The belief that they fell from the sky is explained by Wirz as follows: It is very probable, he says, that these stones once rolled down the slopes of the islands to the shore, owing perhaps to an earthquake; this gave rise to the belief that they had fallen from the sky. Earthenware pots are also sometimes used as roof decoration, as they are on the Sepik; thus, the falling of pots to the earth, he argues, led to the belief that they fell from the sky. (Wirz 966 307, 967 27.) This explanation cannot be accepted, not solely because of its naiveté but also because, according to the traditions related by Wirz himself, part of the people were also said to have come from the sky, and, furthermore, because of the importance of the conception of the sky so frequently found in Melanesia. 2) 966 255, 972 7 f. 3) Wirz 966 255 f, 972 7 f.

settled down. The snake subsequently disappeared in the lake. Several families separated later from Osei¹⁾. In the first place, it must be observed that wandering snakes have frequently been encountered in association with the stone-using immigrants. In this story, however, the snake possesses none of the other characteristic features of the stone-using immigrants; and in particular it is not described as a culture bringer. But, on the other hand, it is remarkable that this snake came from the east, as did also the female culture hero Gragoi. If it is borne in mind that, west of Humboldt Bay, neither megaliths nor other vestiges of the stone-using immigrants are found, and further, that traces of the stone-using immigrants were found on the north coast of the Mandated Territory, it is incontestable that megaliths can only have come to Lake Sentani from the east. We have already mentioned that these immigrants from the east were reported to have brought a certain round stone, which, from the description, was not unquestionably megalithic in character. The fact that this stone harboured the pig spirit, makes it very probable, however, that it was a megalith, and that it was our stone-using immigrants who brought it into this country, since we have seen them to be the introducers of the pig. There is still another reason to believe that this migration from the east is actually a migration of the stone-using immigrants: it has been seen that a number of migrations of the stone-using immigrants of the Aitape District proceeded in a east-westerly direction, the migration of the younger Wunekau brother, of Tenai, and Bugatai for instance, so that the east-westerly migration of the Sentani stone-using immigrants is but a continuation in the same direction of the migrations of the Aitape stone-using immigrants. If this migration did actually proceed along the coast as indicated by the myth, it might be asked why no traces of the stone-using immigrants have been found on this coast. It is of course possible that future investigations on the spot will reveal traces of the stone-using immigrants, but, as things stand at present, it is much more probable that the Melanesians who later settled down on this coast, have overlaid and submerged any possible traces of the stone-using immigrants.

In Netar there is a large crystal which is considered as a "lightning stone", about which it is said that a pregnant woman once went out on the lake in her canoe to fish, when suddenly a violent tempest arose. Lightning struck the woman, so that she died and was buried. A few days later a boy came out of the grave and was brought up by the relatives of the woman. They called him Taimi. When Taimi grew up, he decided to take his revenge and, taking a great number of arrows, he climbed up an areca palm, which by a magic spell he caused to grow so high that it reached the sky. When he was in the sky, he met the lightning (Wiri) sleeping; so he killed it by cutting off its head. He then descended to the earth on his areca palm

1) WIRZ 966 256-260, 972 10 f.

bringing with him the captured head. This is the present crystal¹⁾.

This story, with its ascent to the sky, so characteristic of the stone-using immigrants, agrees completely with the story of Suganainoni of the Arosi on San Christoval, who was also born from a dead woman; he too, to avenge his mother who had been killed by a sky-spirit, ascended to the sky, whence, having carried out his intention, he returned to the earth. It has already been pointed out that this birth from a dead woman agrees with the Maevo myth, according to which the two children of Qat's sister, who kill the ogre Taso, were set free after the decomposition of their mother's body, and the same theme has further been found in Ulawa. The story of the man of Santa Cruz who fled from his father into the sky, and whom he returns later to kill, also belongs to this set of myths. It is particularly significant that the theme of the lengthening of the tree appears in the present Sentani story; and in many of the other analogous stories also the tree is an areca palm. There is still another point of interest. The child in our present story is called Taimi. Now, Taimi is also the name of the man who was brought by the snake from the east to Lake Sentani, and who became the ancestor of a part of the Sentani people. Are these two Taimi identical? WIRZ unfortunately does not say. If they were, however, it would be an additional proof that Taimi's migration was actually the migration of the stone-using immigrants who came to this region.

Before continuing our investigation in the other parts of Dutch New Guinea and the interior of this big island, we shall examine the question indicated in our discussion on Wogeo, viz. whether we are justified in holding that the stone-using immigrants, in their migration to New Guinea, came from the Admiralty Islands. For this purpose we must now turn our attention to the Admiralty Islands.

ADMIRALTY ISLANDS

These islands, as is well known, are inhabited by three groups: the Usiai, the Mantankor, and the Manus. The Usiai, who live mostly on the main island, are generally considered as the aborigines of the group, apart from a group of short people who seem to have existed here. The Mantankor particularly inhabit the islands off the north coast of the main island, and Pak, Tong, part of Lambutjo Island, Lou, Poam, Paluan, etc. further to the east. The Manus inhabit the southern coast of the main island and the islands off this coast. Since, however, the tribes have mingled considerably, the division into three different groups has been questioned by several students, who have emphasized the common traits of all these groups. In any case, it is certain that we are faced with a very mixed people. Both the Usiai and Manus are dark-skinned, except for some mingling of the Usiai with lighter skinned elements, as for instance in Lukus village. On the other hand, there are also some physical resemblances between the Mantan-

1) WIRZ 966 316.

kor and the Manus. On the eastern coast, the Mantankor are smaller than the Manus and have narrower noses than the Manus and Usiai, but on the islands off the northern coast of the main island, e.g. Sori, Harangan, Ponam and part of Pak, and Lambutjo, as well as in Nares Bay, the arched Papuan nose is found. These characteristics are borne out by the fact that on the eastern coast the Mantankor have lighter skin and straighter hair. Thus on Paluan, Poam, and Lou the skin is yellowish "reminding one of Southern Chinese" with high cheek bones and with hair varying from crisp to wavy or straight. Similar types are also found, though less frequently, in Malay Bay, Pak, and Lambutjo. Epicanthus is found on Paluan, Poam, Lambutjo, and Pak. BÜHLER has deemed it necessary to single out the Paluan, Poam, and Lou as a special group of the Mantankor which he calls the "Paluan people". But also in Sori, where the skin is very dark, young people were even "quite light yellowish brown", in Nares Bay on the northern coast of the main island, a case of straight hair was found, and on House Island also wavy hair occurred as well as woolly hair ¹⁾.

Whereas the Usiai are considered as the aborigines ²⁾, the Manus are recent Melanesian immigrants who, according to PARKINSON, "without doubt came across from New Guinea". RIVERS, who is of the same opinion, identifies the Manus with his "betel-people", who here introduced betel chewing ³⁾. The Mantankor, whom we have seen to be light-skinned, mongoloid, and straight-haired, according to PARKINSON, came from Micronesia ⁴⁾.

From the fact that the use of kava in the Admiralty Islands occurs only on Lou, Poam, and Paluan, inhabited, as mentioned, by the Mantankor, RIVERS has drawn the conclusion that the Mantankor correspond to his "kava-people" ⁵⁾. This isolated occurrence of the kava in these three islands and not in the whole of the Mantankor area, is considered by BÜHLER as a reason for distinguishing this group as his "Paluan people". These, he considers, are the most recent immigrants in the Admiralty Islands, who came even later than the Manus, so that, according to him, the chronological sequence of the different groups is a follows: Usiai,

1) MOSELEY 582 387, 583 458, 460, BÜHLER 111 3, 5, NEVERMANN 608 49, 63 f, 66-69, CHINNERY 146 56, SCHNEE 837 41, VOGEL 911 76, 78, PARKINSON 630 351 f, 370, PÖCH 669 4, BUSCHAN 117 97, LEBER 475 264, LUSCHAN 503 550 ff, ROMILLY 739 113, BÖRNSTEIN 85 316 f, COHN 165 317, FRIEDERICI 271 228, RIVERS 725 11 552. 2) PARKINSON 630 374, 641 211, NEVERMANN 608 49. 3) PARKINSON 630 374, 641 211, RIVERS 725 11 553. 4) PARKINSON 630 374, 641 211; elsewhere, 630 352, he says from Polynesia or Micronesia. The Papuan nose which is found in some cases, according to him, points to a relation with New Guinea, and ROMILLY considered the inhabitants of the "Admiralty Islands" as a mixture of Papuans of New Guinea and other people who possibly came from New Ireland and New Hanover. See: PARKINSON 630 352, ROMILLY 739 114 f. 5) RIVERS 725 11 553-555; there he further shows that shell-money, the bow and arrow and incision which, according to him, are elements of the "kava-people", belong to the Mantankor. Regarding the distribution of kava, see also: PARKINSON 630 373 f, NEVERMANN 608 39, 220, BÜHLER 111 24.

Mantankor, Manus, Paluan, the latter, in his view, being the introducers of kava¹). Although there is justification for singling out the "Paluan" people, this group could only be of more recent date than the Manus if, contrary to BÜHLER's opinion, they would not belong to the Mantankor; for, the opinion generally held is that the Mantankor are older than the Manus. On the other hand, Paluan, Poam and Lou are inhabited by Mantankor only, except for a few remnants of the Usiai on Paluan and Lou. Therefore it seems to me most logical to infer that precisely because the "Paluan" people were a small and very recent group of immigrants, their influence has made itself felt little in race and general culture. The fact that kava occurs in these three islands only, seems to give particular strength to BÜHLER's view that its introduction is very recent; for if it were of an earlier date it would certainly have spread over the whole archipelago, owing to the extremely intensive trading relations which have actually brought about a relative uniformity in the culture of the whole archipelago. On the other hand, if, as RIVERS supposed, the Mantankor were identical with his "kava-people" it would be impossible to explain the remarkable restriction of the use of kava to these three islands, since, as we have seen, the Mantankor are much more widely distributed in the archipelago. In these circumstances, I am of the opinion that BÜHLER is quite right in considering the "Paluan" people who introduced the kava as a special group of very recent immigrants, the only difference in my view being that they have nothing to do with the Mantankor. We shall revert to the problem of kava in Melanesia later on.

No unanimity exists with regard to the languages. Whereas PARKINSON and THURNWALD consider the Usiai and Mantankor languages as non-Melanesian, FRIEDERICI expresses the opinion that all three languages are Melanesian, and that the language of the Usiai and Mantankor were so closely connected that in reality they were but one language. BÜHLER also has emphasized the great similarity of all three groups in their general culture, social organization, and language, but he thinks that this uniformity has been brought about by the very intensive trading relations. ZÖLLER and RAY have pointed out the great number of Melanesian words, but this of course is not a solution of the problem, and NEVERMANN has rightly remarked that the grammatical material at hand is still very scanty. MOSELEY has drawn attention to the identity of many Admiralty Islands words with those of Yap Island, and, what is even much more important, to the identical method of counting; this latter fact, according to him, cannot be explained merely by occasional drifts, but must be due to a real contact of culture²). Trading relations are actually so intensive that almost all the points of this area are in more or less direct connection. Other trading relations exist with Agomes and Ninigo, and canoes going to the Purdy Islands were often

1) BÜHLER 111 13, 26, 28, 31. 2) THURNWALD 331 111, PARKINSON 630 376, NEVERMANN 608 49, FRIEDERICI 271 228, BÜHLER 111 6 f, MOSELEY 582 391 f, ZÖLLER 989 368, RAY 694 9.

driven out of their course and reached New Hanover, St. Matthias, Ninigo, Agomes, and the Schouten Islands; this must have led to more regular relations with some of these regions. Thus, on Jacquinot Island in the Schouten Group, PARKINSON met people from the Admiralty Islands who remained there six months living in harmony with the people ¹).

In the Admiralty Islands, modelling of the skull is practised ²), a custom, which in Malekula has been seen to be connected with the stone-using immigrants, and the importance of which we shall point out when we deal again with New Guinea.

On Paluan, and occasionally also on Poam, houses are surrounded by a low stone wall. On Lou Island there is in front of each house a small rectangular courtyard surrounded by larger stones. On Harangan Island off the northern coast, a village surrounded by a stone wall was found ³). Whereas in the other Admiralty Islands gardens are surrounded by wooden fences, on Poam Island they are surrounded by stone walls ⁴).

Of the Manus, FORTUNE mentions certain platforms built up of coral rubble taken from the reef. These platforms are flat and are used for the ceremonies connected with the exchange of wealth when many persons are involved. The platforms are called arakeu. Actually all public events of importance are held on the arakeu. The ranking families have hereditary rights to house sites near which an arakeu is built ⁵). Whether these stone platforms are actually limited to the Manus, and whether they correspond to the circular stone platforms of North-east New Guinea, from where they may have been adopted and introduced by the Manus, is left for future investigation.

If we except this latter information, it is evident that stone-work occurs only in the area inhabited by the Mantankor. The more frequent occurrence of stone-work on Paluan, Poam, and Lou, where the isolated use of kava is encountered, might at first sight give some strength to RIVERS' view that the megalithic people form part of the kava-people. The following data, still more than the occurrence of megalithic stone-work, will, however, show that the traces of the stone-using immigrants are by no means limited to these islands. The simultaneous occurrence of stone-work and kava on Paluan, Poam, and Lou is therefore mere coincidence.

Sacred Plants. It is very much to be regretted that many of the records regarding the use of sacred plants give no detailed indications of the localities but speak of the "Admiralty Islands" in general. Croton, dracaena, and cordyline (drlo) are planted as ornamental shrubs in the villages. A protective power against malignant spirits of the dead is attributed to the cordyline; therefore it is planted near the doors of the

1) PARKINSON 630 351 f, 389 f, 392, NEVERMANN 608 81, 90, 156, 175, 236-241, 298, 301-303, MEAD 538 116-120, FINSCH 236 290, 478, VOGEL 911 92, CHINNERY 146 59, FORTUNE 261 20, etc. etc. 2) MOSELEY 582 411. 3) BÜHLER 111 8, V. D. BROEK D'OBRENAN 98 175, NEVERMANN 608 257, Pl. 15, BIRCHAM 73 202. 4) NEVERMANN 608 157, 169, 172, 279, SCHNEE 837 204. 5) FORTUNE 261 75, 223 f, 244.

houses and near graves¹). Croton leaves are put into armlets, not only because of their colour but also because of their power to protect against malignant spirits of the dead; dracaena leaves are worn in the hair. The power of protection is also the reason for the use of these plants for other purposes; thus the affected part of the body is touched with a bunch of dracaenas, and before a feast, the master of the feast must dance on the feasting ground with a bunch of dracaena leaves. During the initiation of young warriors of the Manus, the master of ceremonies holds a bunch of dracaenas in his hands. A cordyline is used in exorcising black magic, and in the ritual which precedes the final disposal of a skull, the skull is beaten with dracaena leaves. Dracaena leaves are fastened on a certain house of Poam Island which plays a part in black magic; dracaenas are also planted about the houses in Nares Bay on the north-west coast of the main island²).

Notwithstanding the frequent lack of precision regarding the localities, these data show that the use of sacred plants occurs with the Mantankor and Manus. Whether this use was originally confined to one group only, and was conferred upon the other by the intensive relations which exist in the archipelago, or whether the Manus have acquired the use of sacred plants from New Guinea, cannot be decided from the information quoted.

The following information is of particular interest: In front of the men's house of Pue village on Lou Island, there was an enclosure consisting of small stakes put into the ground close together, surrounding a small bed of ornamental shrubs; between the houses, croton and dracaenas were planted³). This enclosure is certainly similar to the "Zierhügel" which we shall come across at many places on New Guinea and which is a characteristic trait of the cultures influenced by the stone-using immigrants; in New Guinea, the enclosure is always to be found in front of the men's house. Although the stone-work of the Admiralty Islands is rather scanty, and it is difficult accordingly to show its connection with New Guinea, this enclosure highly favours such a connection. It is furthermore significant that such an enclosure was found in Pue village on Lou Island, since this island, as we have already seen, is inhabited by Mantankor, and since stone-work in front of the houses was also found there. I do not know whether these enclosures are more widely known in the Admiralty Islands.

Prehistoric objects. Stone mortars were found on the main island⁴) which correspond completely to those of New Guinea and the other parts of Melanesia.

It is common knowledge that the typical weapons of the whole group are spears and daggers with heads of obsidian. This substance is found on Poam, Mouk, and particularly on Lou Island, where the quarries are still visible to-day. The working of this stone was formerly known beyond the

1) FORTUNE 260 114, 261 166 records planting by the Manus of cordyline near the grave. 2) NEVERMANN 608 38-40, 74, 153, 176, 279, 311, 368, MEAD 542 71, MOSELEY 582 401, 404, 583 466, PARKINSON 630 384, 390, 401, 403 f, 406, FORTUNE 261 255 f, 311. 3) NEVERMANN 608 176, THILENIUS 858 II 148, Pl. VII. 4) BÜHLER 111 22, fig. 4.

places where these quarries are situated, for instance, in Loniu and Bubi. It is highly significant that, apart from Mouk, all these places are inhabited by Mantankor. BÜHLER has duly drawn attention to these facts, saying: "The fact that sixty years ago the weapons were relatively rare in the north of the group, indicates that they have spread from the south. Thus, particularly Lou, and perhaps also Poam and Mouk, can be considered as the home of this element of the culture. These islands are for the most part situated in the area of the Paluan people. It seems improbable, however, that they brought the technique with them; one is much more inclined to attribute this technique to the Mantankor, who were able to procure the material only in the south, but who nevertheless knew how to work it at other places too. This view is, however, not final, for in the interior of the main island I received peculiar tools, a big hook of obsidian and a flat rounded flake... of the same material, which had been unearthed during the clearing of the ground and for which the natives were unable to furnish any explanation. Therefore they must be considered as prehistoric. Now, although it is by no means certain that there is any relation between them and the present-day obsidian tools, the possibility that this is so does nevertheless exist"¹). This is borne out by the fact that among the recent types of obsidian spear heads, there is a rare blade which originally was perhaps not intended to be used as a spear head; this blade is semi-circular, axe-like and has a tang-like elongation²). BÜHLER has pointed out that this blade agrees completely with the obsidian blade found in the Yodda Valley, and considered by SELIGMAN as an axe. It will be remembered that owing to the identity, both in shape and technique of this blade with the obsidian blades of Easter Island, SELIGMAN has maintained the existence of a definite relationship between both these finds, and has considered the Yodda axe as a relic of the ancestors of the Polynesians who, on their way to Polynesia, passed through Melanesia. FINSCH and NEVERMANN have compared the recent Admiralty battle axes of obsidian with the obsidian axe of the Yodda Valley³). BÜHLER also is of opinion that there is actually an affinity between all these finds⁴). This is all the more probable, since the light-skinned Mantankor, whom BÜHLER considers as the makers of the recent obsidian implements, are, according to our conclusion, the descendants of the stone-using immigrants in this region; and these latter are precisely the people who, in the other parts of Melanesia, are responsible for the existence of the analogous prehistoric objects.

Mythological evidence. Our opinion that the Admiralty Islands were influenced by the light-skinned stone-using immigrants, is confirmed by the mythology in which many of the themes are found which we have seen to be associated with the stone-using immigrants. Thus the probability

1) BÜHLER 111 21 f, fig. 3, 4. 2) See: NEVERMANN 608 341. 3) FINSCH 236 251-253, Pl. XV, NEVERMANN 608 352 f, see also: Pl. 23 fig. 6, and fig. 199, 200.
4) BÜHLER 111 22 f.

of the megalithic culture having come to New Guinea from the Admiralty Islands is still further strengthened.

To-day, most of the myths are common to all the Admiralty Islands, which, in view, of the close contact of all three ethnic groups and the easy transmission of myths, is not astonishing; on the basis of the local data it is therefore difficult to-day to determine to which of these three groups each myth originally belonged.

It is believed that before the creation of the land, only the sea existed. According to one legend the snake (malai) caused the reefs to rise thus creating the land. Then it created the first human couple, Nimei and Niwong, the trees and food. According to another story¹⁾, Nimei and Niwong created the land, the food plants and trees, the sun and moon, and the people. PARKINSON records that Nimei and his wife Niwong originally came from afar in a canoe over the sea.

According to a myth generally known in all the Admiralty Islands, two sons of Nimei and Niwong wanted to increase the height of Mt. Pounda, in the interior of the main island, so that it might reach the sky, in order to enable them to ascend into the sky. They carried big blocks of rock to the summit of the mountain and heaped them one upon another. The snake "Moat" which lived on the mountain ordered one of the brothers to work for it, however, but the other it permitted to continue heaping up stones. This made the stone carrier so angry, that he took a big rock and threw it to the ground near Papitalai. The rock cut through the land, so that the sea penetrated thus creating the Poauai channel, and separating the two brothers. According to another version, also generally known in the Admiralty Islands, one of the brothers kicked down the stone heap of the other causing a quarrel to spring up between them. This led to their separation by the creation of the channel effected in the manner indicated. Hence one brother was on one side, and the other with the snake "Moat" on the opposite side of the channel. These two brothers, apart from their big stature, are pictured as being quite human-like²⁾.

In these stories we are again confronted with a culture-bringing snake, as in the many other cases where the association with the stone-using immigrants was quite evident; but nothing else is recorded regarding this snake. That the characters of this myth are actually representatives of the stone-using immigrants follows from the fact that Nimei and Niwong, the culture-bringers in the second version, came over the sea, that they are the parents of two sons who attempted to ascend to the sky, that these two brothers, owing to a quarrel, separate, that one of the brothers by his creation of the channel is a physiographical shaper, and that on their separation they went away in different directions. This impression is further strengthened by the association of these brothers with the snake "Moat", which itself is a typical

1) Which MEIER 545 650 states is a Manus story; exclusively? 2) PARKINSON 630 408, 708-710, MEIER 545 650, 652 f, 666 f, 933 f, NEVERMANN 608 366 f, 371.

culture bringer of the stone-using immigrants, as the following myth will show.

According to the legend generally known in the Admiralty Islands, this snake "Moat" (also called "Mat" or "Muat") had in its belly the food plants taro, bananas, sugar cane, yams, coconuts, areca nuts, and also fire and pots. The snake bade the people go down into its throat and fetch all these things; this they did. According to one version, it was one of the brothers previously mentioned whom the snake commanded to fetch all these things from its belly, which he did. In this way all the food plants, fire, and pottery were introduced by the snake. This snake "Moat" which, it has been seen, lived on the mountain in the interior of the island, was said to have come "from somewhere abroad". The snake came to the main island and to the many other islands where it introduced all these things, after which it left the Admiralty Islands. The reason for this departure differs according to the versions; in one, it is said that the snake left because the people also took the red taro out of its belly, which it had expressly forbidden them to do as this would cause its death; according to another version, the snake left, since they tore out one of its caudal vertebrae which they planted, and from which a certain tree sprang up; or it is said that the snake left because they offended it, or for some other reasons. After its departure, the snake went to the mythical island Jap.

This country, according to MEIER, is said to lie to the south or south-east of the Admiralty Islands "i.e. in the area of New Hanover, New Ireland, New Britain and the Solomons"¹). On the other hand, it is thought to be in the east, since in one of the myths the sun goes to Jap Island via Pak, Tong, and Nauna, and shines on Jap before even rising in the Admiralty Islands²). THURNWALD³), however, says that Jap Island is in the west. For these reasons nothing definite can be said regarding the situation of this mythical island Jap. One thing only is certain, that it is not the Yap of the Carolines which is meant. According to the myth, the inhabitants of this mythical Jap Island are light-skinned people, and are compared by the Admiralty Islanders to the Polynesians and the white men. But they are not in the least spirit-like, and are as much human beings as are the Admiralty Islanders, though with fairer skin, a different language and another and more highly developed culture. It is maintained that their ancestors are the same as those of the Admiralty Islanders themselves; that they formerly spoke the same language until a dispute led to the language becoming different⁴).

The identity of this culture-bringer snake with the many analogous snakes of the stone-using immigrants is so evident that it need not be emphasized any further. From the fact that the snake came from "abroad" it is evident that we are confronted with an immigrating culture. Like the other analogous snakes, this snake lived on a mountain in the interior of the country and, like them, migrated from place to place introducing food plants and

1) MEIER 545 649. 2) MEIER 545 475, 940. 3) 878 I 410. 4) MEIER 545 653-659, NEVERMANN 608 369, 373, THURNWALD 878 I 409 f, PARKINSON 630 709.

also pottery. Moreover, it has this in common with the other culture-bringing snakes and the stone-using immigrants, that it finally departed from the world as then known to the natives. As the myth says that the ancestors and the language of the light-skinned Jap people were the same as those of the Admiralty Islands, it is natural to conclude that the ancestors of the Admiralty Islanders were also light-skinned. We have recognized these ancestors of the Admiralty Islanders who migrated to Jap as representatives of the stone-using immigrants, and it follows therefore that these stone-using ancestors of the Admiralty Islanders must have been light-skinned. Although not expressly stated in the myths of the Admiralty Islands, this view is most strongly supported by the actual conditions; for that stratum of the population which is related to the megalithic culture—the Mantankor—is actually light-skinned, and is in fact the only light-skinned group known in the archipelago.

It is well known that immigrants in primitive as well as in civilized societies frequently name their new dwelling places after their original home; thus WIRZ was able to trace the migrations of the Majo Marind owing to the frequent occurrence of the village name "Majo", and Ouvea Island of the Loyalty Group is so called after Ouvea or Wallis Island, the home of its Polynesian immigrants; there are moreover other similar examples in Melanesia and elsewhere. Now, although the position of the mythical Jap is by no means certain, it is according to our premises, natural to suppose that the light-skinned, and probably stone-using people of the mythical Jap passed through or came from Yap in the Carolines. Such an origin of the megalithic culture of New Guinea and the rest of Melanesia would entirely be in accord with the racial characteristics and the abundance of megaliths in the Carolines as well as with the fact that artificial islands were encountered at Ponape Island. There is still another argument in favour of this view, viz. the introduction of pottery. It has frequently been seen from the mythological evidence and also from the actual finds that the introduction of the coiled pottery is due to the stone-using immigrants; and also in our present myth the introduction of pottery is attributed to the megalithic culture-bringer snake, although the myth makes no mention of the technique of this pottery. Now, in the manufacture of the present-day pottery of the Admiralty Islands, both the modelling technique, as well as the coiling method are used ¹). SCHURIG has clearly shown that, in the whole of Melanesia, the modelling technique is definitely Melanesian; and since in the Admiralty Islands both ethnic elements—the Melanesian Manus and the stone-using immigrants, not to mention also the obviously Melanesian "Paluan-people"—exist, we are justified in attributing the modelling method to the Manus, and the coiling method to the stone-using immigrants. The opinion that the stone-using immigrants of the Admiralty Islands came from Yap Island in the Carolines, is particularly borne out by the fact that in Micronesia coiled pottery occurs precisely on Palau and Yap ²). Also on many of the

1) VOGEL 911 92 f, PARKINSON 630 356, SCHURIG 841 71, 84. 2) SCHURIG 841 6 f, 72, 812 f.

Marianas islands where pottery is not made to-day, a great number of prehistoric potsherds were excavated, but the technique could not be determined from the sherds. However, on Guam Island, L. THOMPSON found a prehistoric burial urn about 3 feet below the surface of the ground "in an inverted position and covering human remains and artifacts" ¹⁾ thus entirely corresponding to the type of pot-burial which, in the entire area of Melanesia, we have attributed to the megalithic culture. Unfortunately, the position of the skeletal material has not been reported. But THOMPSON makes the very important remark that the implements found in the urn are similar to those which have been found in monument (latte) sites, so that here again one would be inclined to connect this pot-burial with that culture which is responsible for the erection of stone monuments in Micronesia. Excavations made by KUBARY and HOLST on Ponape Island furnished no potsherds ²⁾, but in the Frankfort Museum, SCHURIG found a reddish potsherd which, together with axe blades of stone and a spear head of obsidian, had been unearthed from the kings' graves. SCHURIG ³⁾ has pointed out that such a single potsherd could of course be trade ware, and need not necessarily point to indigenous pottery. It is highly significant, however, that this potsherd was found together with a spear head of obsidian such as are found in such quantity in the Admiralty Islands, and further, that these objects were excavated from the kings' graves. Attention must furthermore be drawn to the fact that stone mortars and stone pestles have been found in various islands of the Marianas and Carolines ⁴⁾, a fact, which furnishes additional support for the opinion that the stone-using immigrants came to Melanesia from the Carolines.

Another myth, which is also commonly known by all the Admiralty Islanders, tells of a man called Muan, who wanted to bring in his canoe all the elements of culture from Lokomo to the Admiralty Islands. In a storm, he was forced to throw ballast overboard, so that he arrived in the Admiralty Islands with only the pig, dog, taro, coconut, yams, and bananas, whereas the other things he had on board were lost ⁵⁾. Although nothing else is recorded of this man, it is remarkable that the introduction of the coconut and the other food plants took place at the same time as that of the pig, and that all these things were brought by foreign immigrants who came from over the sea.

The following myth is recorded by MEIER as a Manus myth: Sun and moon were brothers. Each of them had married thirty women. One day the moon deceived the sun, saying that he was ill. He therefore remained at home whilst the people of the sun and the moon went fishing. When the moon was alone, he seduced one of the wives of the sun, but was unable to deliver himself from the act. In this situation they were both found by the sun. The sun, very angry, took its people and with them went away

1) THOMPSON 864a 26 f, 40, 864 b 24, 26, 31. 2) SCHMELTZ-KRAUSE 825 283, quoted by SCHURIG 841 7. 3) 841 7. 4) THOMPSON 864a 38, 864b 39 ff, FINSCH 238 111, 205 f, 329, fig. 32, fig. 56. 5) MEIER 545 666, NEVERMANN 608 369.

in its canoe taking some sand of the shore along. They went to Pak, Tong, and Towi, but nowhere did the sun want to stay and ordered the people to continue paddling. Thus they came to the open sea where no more land was to be seen. Here the sun wished to remain. They poured the sand of the shore into the sea and from this originated Nauna Island. Here the sun left its people and went for ever to Jap Island. (The eastern and south-eastern direction of this migration makes it probable that its further stage, the mythical Jap, was also in the same direction.) Later the moon delivered himself from the woman. Had he not committed this deed, the sun and moon would both rise in the east; but they separated, and the sun now rises in the east, and the new moon in the west¹).

It is immediately apparent that in this story we are again confronted with the two antagonistic brothers, and that the theme of adultery with the brother's wife appears in exactly the same manner as in the many other analogous myths. It is of the utmost interest that in this story the artificial creation of islands occurs again in all its clearness. The separation of the two antagonistic brothers, the one going to the east and the other to the west, has also been found in the analogous myths of the Monumbo, in the myths of the Wunekau brothers of the western part of the north coast of the Mandated Territory, in the myths of the two brothers of Tumleo, etc. The fact that in this story the mythical Jap Island is again the ultimate goal of the hero as it was for the culture-bringing snake, gives further strength to the view that both these myths are genetically related. It has been seen that P. O. MEYER attempted to interpret the Wunekau brothers as sun and moon; in our present story the two antagonistic brothers are actually called sun and moon. It must, however, be remembered that in the rest of Melanesia these myths are usually not associated with the heavenly bodies. It is therefore most probable that in the Admiralty Islands we are faced with a secondary association of the two antagonistic brothers and astral conceptions.

According to a tradition of the Mantankor of Ndrombut, a certain woman who had been brought to "Jap" Island, is said to have conceived from the sun; she gave birth to a child from whom descend "all the people the Jap and the Manus"²) who are thus children of the sun. But again the question arises, whether this "sun" is not only a synonym for one of the brothers mentioned above. P. J. MEIER, who records this myth, does not say, since he considers this brother as being identical with the sun. If our suggestion were true, we would simply be faced with a stone-using creator of the population, as in the many other stories of the stone-using immigrants, and his identification with the sun would be just as questionable as it is in the version of the two brothers³).

The theme of groups of brothers appears furthermore in the following

1) MEIER 545 940, NEVERMANN 608 371. 2) MEIER 545 938, NEVERMANN 608 371.
3) Regarding some origin myths containing, however, none of the themes generally associated with the stone-using immigrants, see: MEIER 545 651 f.

very characteristic myths. The myth which follows is recorded by MEIER as a Manus myth: Ten brothers were living together; their father was dead, but their mother lived with them. When the brothers went for food, they never gave their mother anything, but ate it alone; only the youngest gave food to his mother. Once the mother said to the youngest son: to-morrow I am going to die, bury me in your house and after three days an areca palm will spring up from my head; the palm will bear ten fruits, nine ripe and one unripe. The nine ripe give to your brothers, but the unripe take yourself. Everything happened as the mother said, and the youngest brother did as he had been told. Now, the nine ripe fruits changed into nine old and hideous women, but his nut became a young and beautiful woman. So the nine brothers decided to outwit the youngest brother in order to take his wife. Together they went fishing, and when they saw a shell in the sea, they ordered him to dive for it. When he was deep in the water, they went away in their canoes and began to look for the woman. But she had changed again into an areca nut hanging on the palm, so that they were unable to find her. She waited for her husband, and when he came back she descended from the palm and changed again into a woman. The youngest brother reproached his elders; then, together with his wife he climbed the areca palm saying: mother, grow into the sky. This happened and the two went into the sky¹).

In this myth we are again confronted with a group of brothers; their number is ten, as in some of the analogous stories of the stone-using immigrants. The origin of the areca palm from a head appears here again; this is an incident which happened mostly in connection with the coconut palm (this version occurs here too). The brothers envy their youngest brother his beautiful wife, as did also the brothers of Qat, Ambat, and the many other stone-using immigrants; we might also recall the analogous story of the Kai of the Sattelberg where the rattan-tree-women of the brothers are hideous, because the youngest brother lets the fruits fall from the top of the tree, whereas with his own fruit he descends cautiously from the tree, so that his wife is beautiful. And again, the attempted killing by means of the giant clam, occurs in the present story, as does also the growing of the tree by which ascension to the sky is effected.

In this connection the following story which PARKINSON records from the "Admiralty Islands" is of interest: Ten fruits were in their husks on a tree. But at nightfall they fell out of their husks to the ground, changed into women and bathed in the sea. A man who was passing saw the bathing women, whose bodies were light-skinned like that of albinos; he persuaded them to come near, telling them that he wished to marry them. Nine of the women agreed, but the tenth refused, slipped into her husk and again became a fruit²). This story looks very much like a variation of the episode of the ten women in the preceding story of the ten brothers. It is therefore of great interest that these women are here

1) MEIER 545 664-666. 2) PARKINSON 630 715.

described as being light-skinned. In these circumstances it is perhaps permissible to doubt that the story of the ten brothers is a story of the Manus only.

The following story is recorded from Lambutjo Island, which is inhabited by Manus, Mantankor, and probably also a few Usiai. Five brothers, one of whom had originated from the fruit of a mango, were left alone by their parents; they met an ogre who wanted to eat them. They spent the night hidden under the roof. To distinguish them from his own children, the ogre fastens pieces of cloth around the necks of his children. But in the night when they are asleep, the mango child takes off their tokens and fastens them around his own and his brothers' necks, whereupon the ogre kills his own children and eats them. The fleeing children are pursued by the ogre, but the mango child makes his brothers enter a hole in which they hide and are saved. Since, however, his brothers had always treated him badly, whereas he himself was always kind to them, the mango child leaves his brothers, goes into the sea and becomes a dugong ¹⁾. It may further be added that, according to another myth generally known in the Admiralty Islands, the ogre mentioned in this story is said to live in the sky ²⁾. This story resembles strongly the numerous ogre stories of Qat, Ambat, Matiktiki, etc. of the New Hebrides and the other parts of Melanesia. The hiding under a roof, or in a hole, the deceiving of the ogre who eats his own children, and the final departure occurred in many of these stories, whose association with the stone-using immigrants we have shown ³⁾.

Besides the myth telling of the introduction of the coconut by the culture-bringing snake, another myth, which MEIER declares to be a Mantankor myth, describes the origin of the coconut palm in the following way: The woman Hi Pipiu of Nauna Island had two sons. Once, when they went fishing there came a spirit which devoured the elder brother leaving only his head. The spirit then went back to his country, the sky. The younger brother brought the skull to his mother. They buried it, and five days later a coconut palm sprang from it, growing so high that it reached the sky. Now the younger brother took dogs' teeth and on the coconut palm climbed to the sky to see the spirit. He hid the dogs' teeth near the door. When the spirit took a stone axe to kill the man, dogs sprang up and bit the spirit so that it died. Then the man took all the things (the myth does not state what these things were) and descended to the earth on the coconut palm. "He descended to the earth, he fell to the earth and died. If he had not fallen down, the coconut palm would still be reaching the sky, and we would be able to ascend to the sky. He fell and the coconut palm shrank" ⁴⁾.

1) THURNWALD 878 I 423-427. 2) THURNWALD 878 I 418-423, MEIER 545 936 f.

3) Regarding another story of an ogre and two brothers, which shows some resemblances with our present story, see MEIER 545 363-365, THURNWALD 878 I 418-423, 427 f. 4) MEIER 545 660-662, NEVERMANN 608 369; a somewhat similar version in which, however, the spirit is not in the sky, is recorded from Lambutjo. MEIER 545 662 f. In a Manus myth it is related that a certain man threw a stone into the air which changed into the coconut. MEIER 545 363 f.

Besides the origin of the coconut out of a skull, and the growing of a tree into the sky, two themes which are familiar to the stone-using immigrants, the killing of a sky-spirit occurs in this story as in the story of Suganainoni of the Arosi, Taimi of the Sentani people, and in the story of Santa Cruz ¹⁾.

The resemblance between the Admiralty Islands and New Guinea as regards stone-work, the use of sacred plants, the modelling of the skull prehistoric objects, and the mythology, and, furthermore, the fact that canoes from the Admiralty Islands were sometimes driven off to New Guinea, lead to the assumption that the stone-using immigrants came to New Guinea from the Admiralty Islands, although we know of no tradition describing this migration. The occurrence of almost all these elements in New Ireland and New Hanover, makes it probable that the stone-using immigrants migrated likewise in this direction. This view is supported by the fact that the mythical Jap Island is most likely to be situated east or south-east of Nauna Island, so that an extension of the migrations of the stone-using immigrants beyond this island must have touched New Hanover and New Ireland; and this opinion is furthermore strengthened by the fact that canoes are frequently driven from the Admiralty Islands to New Hanover. Therefore it is, in my opinion, most logical to suppose that one group of the stone-using immigrants went from the Admiralty Islands to New Guinea, whilst another migrated to New Hanover and New Ireland.

ST. MATTHIAS, E MIRA AND TENCH

The inhabitants of these islands, which are situated very far off in the north, are racially closely akin to the inhabitants of New Hanover and New Ireland. Besides Melanesian elements there are also Polynesian and Micronesian types.

Thus on St. Matthias the hair varies from frizzy to wavy and is sometimes even quite straight; the skin is very dark with frizzy-haired individuals, but lighter with others; arched noses also occur, and although the majority of the people on these islands are of medium height, there are some short individuals also ²⁾. As on St. Matthias, the mingling of races on E Mira Island is likewise evident and is particularly clear from the occurrence of concave, convex, broad, mesorrhine and leptorrhine noses ³⁾. On Tench Island where the racial conditions are similar, frizzy, wavy, and straight hair occurs, the skin is copper-coloured, and in some cases even lighter, the eyes are oblique, with epicanthus, and the cheek bones are high, so that an intermingling of Melanesians, Polynesians, and Micronesians is generally taken for granted ⁴⁾. St. Matthias and E Mira are also identical in culture and language. Cultural relations, including an analogous social organization

1) It may be remarked that the number 5 occurs frequently in connection with the stone-using immigrants. 2) PARKINSON 630 320, 636 229, 321, NEVERMANN 609 42-45, 131 ff, 247, BUSCHAN 117 154, DANIEL 181 122. 3) CHINNERY 147 131, 205, NEVERMANN 609 45, PARKINSON 630 320, 637 221. 4) NEVERMANN 609 46, 250, VOGEL 911 67, PARKINSON 630 342.

and language, exist with the Admiralty Islands, New Ireland, New Hanover, and Micronesia. There are furthermore traditions in St. Matthias of an immigration from the north, but no indications are given as to the exact locality. In view of the probable immigration of the stone-using immigrants to the Admiralty Islands from Micronesia, this tradition is of particular interest. In a certain district of E. Mira, there is further the belief in an origin from Tench Island ¹⁾. A Tench Island tradition, according to which the Tench people are said to have come from E. Mira, has been challenged owing to the circumstances in which this tradition was obtained ²⁾. In a St. Matthias story it is related that fire and the coconut were fetched from New Hanover by two St. Matthias men and brought to St. Matthias; but this myth does not report of a migration from New Hanover to St. Matthias, and NEVERMANN is certainly right in emphasizing that it would not be permissible to infer that such a migration took place ³⁾. There seem to be differences both in language and general culture between St. Matthias and New Hanover ⁴⁾. The language of St. Matthias, which is similar to that of E. Mira, is Melanesian with some Polynesian elements ⁵⁾. To-day St. Matthias is very isolated; trading relations exist only with E. Mira, but St. Matthias canoes are occasionally driven to New Hanover; canoes driven from the Admiralty Islands to St. Matthias have already been mentioned ⁶⁾.

No stone-work is recorded from St. Matthias as far as I can see ⁷⁾. On E. Mira, the houses are usually built on a low mound of stones, with a sandy floor ⁸⁾. SPEISER ⁹⁾ mentions "megaliths" of E. Mira, without, however, giving any details. On Tench Island "the dwelling houses are built on the ground, their entrances being closed by flat stones smoothed by the sea" ¹⁰⁾. Whether a regular arrangement of stones is meant is not clear

1) NEVERMANN 609 176, 245-247, CHINNERY 147 115-118, DANNEIL 181 123, BENNINGSEN 193 XI 640, PARKINSON 630 334. 2) NEVERMANN 609 47, 195, 248; 5 38. 3) NEVERMANN 609 101. 4) VOGEL 911 68, NEVERMANN 609 249. 5) PARKINSON 630 320, 325, 336, VOGEL 911 61, FRIEDERICI 272 273, CHINNERY 147 112, 205. 6) SCHNEE 837 171, NEVERMANN 609 45, 174-177, 195, 248, VOGEL 911 74, DANNEIL 181 124, CHINNERY 147 141, 201, PARKINSON 630 334, 336, FINSCH 236 437. 7) On E. Mira, where, as also on St. Matthias, ceremonial combs are worn, it is said that the art of making these combs was copied from the people of St. Matthias, but is now a lost art. Only men who have been initiated may wear them, and they are supposed to give strength to the wearer. The combs are sometimes of considerable size, and those mentioned by DANNEIL for instance, vary between 12 inches and 22 inches in length. The top of one of these combs called siliateulu of E. Mira, was divided into two branches and resembled a forked post as found in New Ireland. CHINNERY was informed that it "represents a stone of that name which stands in the sea near Salutana, in St. Matthias"; and another comb called siliwavanga, with two branches meeting to form an arch (about this type of comb see: NEVERMANN 609 Pl. 5, PARKINSON 630 322, fig. 55) was said to "represent another large stone, Wafanga, in the sea at St. Matthias". CHINNERY 147 173, fig. 9, 10; re combs see: NEVERMANN 609 69 ff, PARKINSON 630 322, CHINNERY 147 195 f, DANNEIL 181 118 f. Now, a stone which resembled the shape of this comb would be reminiscent of a monolith. Are these coincidences, or does some relation actually exist? The knowledge we possess at present does not enable us to answer this question. 8) CHINNERY 147 145, fig. 22, 26. 9) 797 156. 10) 5 38.

from this information and is not confirmed by the other sources, as far as I see. Equally vague is the information according to which, on the shores of Tench Island, piles of coral stones were heaped up ready for throwing them at any intruder¹).

Sacred Plants. On St. Matthias and E Mira the ornamental plants rairaien, piripiri or purpur are grown, but their botanical names are not recorded. On E Mira, croton is planted round the houses. It seems that dracaena is here called ieri. On Tench Island ornamental shrubs are planted on burial grounds²).

Prehistoric objects. On E Mira Island, three stone implements were found which, according to CHINNERY, "in the olden days had evidently served the purpose of adzes. These tools are unlike anything that the writer has seen; nothing whatever is known about them by the inhabitants of E Mira, and they belong evidently to a culture that has since become lost"³). But as CHINNERY gives no detailed description we cannot form any judgment.

Mythological evidence. According to a St. Matthias story, the first canoe was built by Karakarasan, a being of stone. To-day Karakarasan is in the water and it seems also that he originally came out of the water. Karakarasan is a male being having ten brothers. Their food consisted of earth and fish, but once they found a small taro, planted it, and thereafter they no longer needed to eat earth. Karakarasan and his brothers created also pigs and axes; they built houses with the material of the sago palm, and invented canoes. In their canoe they went to the sun. When they were near the sun, one of the brothers fell down in the canoe owing to big seas and the canoe broke. The other nine brothers all fell into the sea and were drowned. Karakarasan, however, climbed up a tree into the sky and came to a star. Here he met many star people who were ignorant of normal intercourse. He was the first to have normal intercourse with the women, whereupon one of the women bore a child. Once while chasing a lizard, the child removed some leaves and was able to look down to earth. When Karakarasan himself looked down and saw his mother, he made a cord on which he descended to earth⁴).

The following E Mira story is perhaps but a variation of the preceding St. Matthias myth. According to this myth there lived three brothers on E Mira. Having no garden, they were forced to live on roots or whatever they could find in the bush. Once one of them discovered a taro which

1) VOGEL 911 70. 2) NEVERMANN 609 31 f, 99, 106, 158 f, 191; 5 38. 3) CHINNERY 147 138. 4) NEVERMANN 609 208-212; in E Mira it was said that Karrekarsaine was the wife of the being Kiu-Kiu, who created mankind. NEVERMANN 609 212. According to another St. Matthias myth, Namanama is the creator of man, pigs, and taro. He himself is said to have been created by Esailiu. NEVERMANN 609 208. According to an E Mira myth, the people of E Mira and St. Matthias are descendants of a certain woman. CHINNERY 147 135. But nothing else is recorded of any of these characters.

they planted, and a crop of taro appeared. One day they quarrelled, and the finder of the taro dug it up and took it to St. Matthias. After his departure great trouble fell upon the two remaining brothers. All their taro died. They followed their brother to St. Matthias, and there found extensive crops of taro which their brother had introduced. Ever since that time it has been useless to plant taro at E Mira, but at St. Matthias, taro grows in abundance¹).

I think the following reasons are in favour of the view that Karakarasan is a stone-using immigrant: He is a being of stone²); the fact that he came out of the water probably indicates that we are confronted with immigrants who came from over the sea; like Qat and some of the other stone-using immigrants, he has ten brothers; he is a culture-bringer who, besides food plants, characteristically also introduces pigs, and by the introduction of the canoe he appears with even greater clarity as a sea-faring immigrant; the theme of the introduction of normal intercourse has also been found in connection with some of the stone-using culture-bringers; and the ascending on a tree into the sky and the final descent to the earth was also frequently associated with them. In the probably analogous E Mira version, the theme of the quarrel of the brothers occurs again, though less typical, as well as the theme of the final departure; and it is highly characteristic that all the taro dies after the departure of the culture-bringer, as it did in the many stories of the other stone-using culture heroes, whose final departure caused a deterioration of the conditions of life in general, and of the crops in particular.

An E Mira story relates that once some men found a very large tree in the bush; they decided to cut it down, and build a canoe. They worked so hard that by night it needed only the outrigger to complete it. While they slept, however, a spirit commanded it to don its branches, chips, bark, etc. and to stand upright in the ground as before. Again they began their work, but again the same thing happened, so they left the spot. That is why there are so many trees suitable for canoes in the bush at E Mira and why the number of canoes is so small³). We recognize here the familiar theme of the coming together of the chips, as in the stories of Qat of the Banks Islands, Lata of Santa Cruz and the analogous stories of Dobu, Taupota, Huon Gulf, and Bilibili, but the heroes of the present story have no characteristic traits.

Another myth describes a man who separated the islands E Mira and Tench which were formerly united, but this character also has no other typical traits⁴).

1) CHINNERY 147 139. 2) In E Mira the changing into stone is mentioned in connection with many mythological beings which show no visible association, however, with the stone-using immigrants; for this see the myths recorded by NEVERMANN 609 207 f, CHINNERY 147 135, 138, 140-143, 156, 158. 3) CHINNERY 147 137 f. 4) CHINNERY 147 136.

NEW GUINEA (concluded)

THE INTERIOR OF THE MANDATED TERRITORY

We shall now resume our study of the interior of the Mandated Territory. It has frequently been seen in the course of this work that the stone-using immigrants not only settled on small islands, but that in many cases they penetrated deeply into the interior. A convincing proof of this will be furnished in the following discussion on New Guinea.

On the Lower *Markham River* the languages of the Labo, Lae Womba, and Lae Timbu are Melanesian¹⁾ and those of the Middle Markham also indicate that the inhabitants of this region are Melanesians. Even the people of the Upper Markham understood these Melanesian languages to some extent, which shows that the Markham must have formed a very important highway along which the Melanesians penetrated into the interior.²⁾ This seems to be confirmed by the racial characteristics, but we have very little information on this point. Even the Azeras, who inhabit the watershed between the Upper Markham and the Upper Ramu are, according to DETZNER, "obviously of Melanesian origing" but KEYSER thinks that racially they must be considered "rather as Papuans than as Melanesians"; as to their language, PILHOFER is of the opinion that it is related to the Melanesian language of the Lae Womba, whereas KEYSER remarks that a Lae Womba native who accompanied him on his expedition was unable to make himself understood by the Azeras³⁾. Wavy and even straight hair is frequently found with the Lae-Womba Melanesians⁴⁾ and it is remarkable that, according to a Tami myth, a Tami girl migrated up the Markham River⁵⁾. It may further be added that the Samukeb, who live further east on the Upper Imeng River (a tributary of the Bulung) are racially of Melanesian type, although their language is non-Melanesian⁶⁾.

There are no traces of the stone-using immigrants on the Markham River, as far as we know; but the knowledge about this region is very scanty. In view of the fact that on the Watut River, a tributary of the Markham, and on the Bulolo River, a tributary of the Watut, prehistoric finds belonging to the culture of the stone-using immigrants were made, the racial and linguistic characteristics we have mentioned are perhaps not entirely without significance. We shall, however, refer to this question again later.

This region, as well as the watershed of the Watut-Tiveri River, is inhabited by the Kukukuku who extend into Papua as far as the Upper Tauri and the Upper Vailala⁷⁾. They are a short, sturdy, and sometimes

1) NEUHAUSS 603 44, 125-127, LEHNER 486 307. 2) NEUHAUSS 603 126, 196, KEYSER 429 581. 3) DETZNER 191 151 f, KEYSER 429 581, PILHOFER 658 147. 4) NEUHAUSS 603 98. 5) BAMLER 44 556 f. 6) PILHOFER 658 144. 7) BLACKWOOD 80 15, PRYKE in 712 (1911/12) 77; for an even wider application of the name Kukukuku see HIBES 359 163.

light-skinned people with, occasionally, tall individuals¹). They speak a Papuan language²). Their raids extend very far, even to the south coast of Papua³). On the other hand, the Waria people are visited by the inhabitants of the Upper Bulolo⁴).

Sacred Plants. When a death occurs, the Kukukuku plant red cordyline at the house of the dead as a sign of death. Many huts are encircled by fences consisting of small trees, generally a species of dracaena. In the gardens crotons and other ornamental shrubs are planted⁵). BLACKWOOD⁶) gives the following remarkable information concerning the Kukukuku of the Upper Watut River: "There are some very beautiful flowering trees. The graceful spread and brilliant colouring of *Albizia fulva*, whose flowers somewhat resemble mimosa, is a very characteristic feature of the landscape. The natives do not fell it, as they say the spirits of their dead like to sit on its branches". This shows the complete functional identity with the other sacred plants of Melanesia, whose close connection with the spirits of the dead has frequently been observed.

The information given by DETZNER, that graves are marked by the planting of ornamental shrubs, lime, and pieces of sandstone⁷), seems to apply to the Middle Watut.

Prehistoric objects. On the Watut River, at the point where the Irowat and the Surprise Creeks join the Watut, a bird's head and neck carved in what is probably andesite, was found. There were also found on the same site: a mushroom-shaped object carved in chist. The upper surface appears to be a cranium with raised supraciliary ridge and protruding eye sockets; other objects from this site are a pestle and mortar carved in chist, two adze blades made of chist, an object made of slate, elongated oval in shape; the whole of the circumference is brought to a sharp edge. It is 29 inches long and 4¾ inches in its broadest part. Another pestle was found at Slate Creek lower down the Watut River. Fragments of mortars and axes were also found on the Bulolo River⁸). The mushroom-shaped object, in HADDON's⁹) opinion resembles the "phallic animal figure" found on the Upper Giriwa River which we have already mentioned. MURPHY¹⁰), however, thinks that it represents the head of a cassowary. A prehistoric mushroom-shaped carved stone has already been mentioned from Lake Sentani, but its carvings are different. We do not intend to embark upon a discussion of style, but it should be noted that the way in which the eyes of this stone are depicted agrees completely with that of the carved monoliths of the New Hebrides and the upright gongs in the same archipelago¹¹). The genetic connection of all these finds is even more

1) BLACKWOOD 78 216, 80 16 f, MURRAY 595 171, CHINNERY 143 115; 712 (1918/19) 23. 2) BLACKWOOD 78 212, RAY 703 68. 3) MURRAY 595 170, 596 184 f, BLACKWOOD 78 241; 712 (1919/20) 29. 4) CHINNERY 144 38. 5) BLACKWOOD 78 228, 80 18; 712 (1928/29) 8. 6) 80 14. 7) 192 126. 8) SHERWIN 780 71-73, fig. 3-8, MURPHY 594 38 f. 9) In SHERWIN 780 73. 10) 594 39. 11) See SPEISER 789 Pl. 16 fig. 4, Pl. 97 fig. 3, Pl. 10 fig. 4, Pl. 104 fig. 4, etc. etc.

clearly demonstrated by the fact that here again is a bird's head carved in stone corresponding to the stone bird of the Aikora River and other parts of Melanesia, where its association with the stone-using immigrants is evident.

SHERWIN has indicated the length and breadth of the axe blades, but unfortunately not their section. In his figures 6 and 8 he simply draws the outlines, but figure 6, particularly, gives the impression of being a quadrangular axe, although from the drawings this is not certain. In view of the fact that an axe with squared edges was found in the Sogeri District, and particularly since the occurrence of quadrangular axes in Melanesia is of the utmost importance, it is the more to be regretted that SHERWIN did not describe his finds in greater detail. The axes made by the present people are either circular or oval in section¹).

It might further be mentioned that at the neighbouring headwaters of the Kiapou River, a stone mortar was also found²). Rock paintings were found in the region of the Buang tribe on the Snake River (a tributary of the Watut River) which falls into the Watut near the mouth of the Bulolo River³). As far as I know, there are no traditions indicating from which direction these finds or the stone-using immigrants to whose culture they must belong, may have come to this region. Whether there is direct connection between them and the group of analogous stone-using immigrants of the interior north of the Huon Gulf, cannot be shown at present. Although our knowledge of the Markham River cultures is still very scanty, the complete lack of any elements belonging to the culture of the stone-using immigrants nevertheless leads to the conclusion that the Markham Valley was not used by the stone-using immigrants as their highway in penetrating the country, whereas it was certainly used by the Melanesians who probably came later. The fact that some of the prehistoric objects of the Upper Watut River show strong resemblances to the objects of the Upper Girewa and the Aikora River makes it probable that the stone-using immigrants who crossed New Guinea in the latter region, branched off from there to the north-west. This view seems further to be supported by the fact already mentioned that the Upper Bulolo people make visits to the Upper Waria, where the influence of the stone-using immigrants was manifest from the existence of prehistoric objects, the use of sacred plants and perhaps also from the racial characteristics. But this assumption is in any case of a purely provisional character, since our knowledge of this region is still incomplete.

Mythological evidence. The Kukukuku tradition of origin is embodied in a legend according to which there was once a man—where he came from nobody knows—who was walking along when he heard voices coming from a tree. He cut down the tree and from the trunk there emerged the people⁴). This story is of interest, since it coincides with the

1) BLACKWOOD 80 22. 2) HIDES 359 134, 164 f; 712 (1930/31) 13; with regard to the racial characteristics of the Kiapou "pygmies" see: HIDES 359 89, 91, 163, 712 (1930/31) p. 12. 3) VIAL 905 66 f. 4) BLACKWOOD 80 28, 78 213 ff.

numerous stories of the Trans-Fly region, where, as it will be seen, this hero who liberated the people from the tree is very likely to be a representative of the megalithic immigrants. It is therefore significant that, according to the Kukukuku story, this hero was "walking along" an expression which perhaps designates him as a wanderer.

Sepik River: RECHE, who has studied the cultures of the Sepik from its estuary to the Hunstein Range (Malu village), has divided this area into three cultural provinces, which differ from one another in material culture, race and, as RECHE believes, also in language. These provinces are: 1) from the estuary to about 60 kilometers up the river, 2) the region from Angorum to Annim (or Kjinga) and 3) the region from Mandanam to the Hunstein Range. Beyond this, a fourth culture may be recognized which, according to RECHE, probably derives from the neighbouring mountains ¹⁾. This scheme in its essentials, but with slight modifications as to the extension of the first two culture provinces, has been accepted by NEUHAUSS and LUSCHAN ²⁾. NEUHAUSS is of the opinion ³⁾ that the inhabitants of all three provinces are "everywhere Melanesians and not pure Papuans" and he thinks it highly probable that the languages also of these provinces are Melanesian. But no definite opinion can yet be expressed regarding the languages, since our knowledge of this problem is insufficient. Most of the languages which have been defined are Papuan, although at the same time it is obvious that there exist many more recent influences. With regard to the racial characteristics, RECHE is of the opinion that an aboriginal, dark-skinned, short and sturdy race has been overlaid by an immigrant people of lighter skin, taller stature and less primitive features. "The immigrants seem to have settled down particularly in the estuary and the middle part of the river (i.e. the third culture province) ... whereas in the interjacent area and in the Hunstein Range the aboriginal people have been preserved relatively unmixed" ⁴⁾. The different culture provinces will now be studied separately.

I. The inhabitants of the estuary who belong to the lighter-skinned group are tall and frizzy-haired; epicanthus was not observed by RECHE, but he supposes that it occurs occasionally, since on the nearby Bam Island it is frequent ⁵⁾. The language of the villages Watam, Kopar, Mabu, and Mangot we know definitely to be Papuan ⁶⁾. As RECHE has pointed out ⁷⁾ the culture is really part of the coastal culture reaching from Hatzfeldt Haven to Berlin Haven. As stated, there are trading relations between the Sepik estuary and the adjacent coast east and west of it, as well as with

1) RECHE 707 472-477, 708 70-74. 2) NEUHAUSS 603 330-332, LUSCHAN 502 104; SCHULTZE's division of the Sepik, 839 45, 49, 67 f., into four regions is based upon geological and geographical characteristics. 3) 603 128, 330. 4) RECHE 707 57, 474, SCHLAGENHAUFEN 823 199. 5) RECHE 707 52, PÖCH 666 233, 671 173. 6) RAY 704 322, PÖCH 671 173. 7) 707 480.

Manam and Wogeo; and trading in articles of food from Wogeo seems to be carried on through the intermediary of the Nor Papua, even miles up the Sepik. Generally speaking, we know very little about the trading relations on the Sepik. We are told that coral lime is traded from the coast up the river; the existence of trading relations is further evident by the fact that many sea shells were found in use on the upper river, and that in the estuary region earthenware bowls were found which must certainly have come from the Middle Sepik¹⁾. But further details are wanting regarding these trading relations. RECHE²⁾ has drawn attention to the strong resemblance of the material culture of this region to that of the Admiralty Islands. This, in our opinion, is an exceedingly important statement, as according to our reasoning there are good grounds for supposing that the megalithic culture of Wogeo and the north coast of New Guinea derives from the Admiralty Islands.

It must, however, be emphasized that no stone-work, no ceremonial use of sacred plants, and no prehistoric objects have been recorded up to the present from this estuary region, and it is also to be regretted that we have no myths of this region. The only object worth mentioning is an effigy described and figured by RECHE³⁾ from Kopar, near the mouth of the Sepik. It consists of a small extended male figure carved in a thin pole, a skull through which the pole passes forming the head of the figure. The front half of the skull is covered with cement and the upper part of the face is smeared with red earth. Each orbit is filled with a disc of nacre. On the chin is a strip with human hair to represent the beard.

II. In the second culture province the people are shorter, darker, more prognathous, and some are of semitic type⁴⁾, but very little else is known regarding this region. It is remarkable that the people of Angorum village were able to understand the language of the coast, and that those of Gauian village understood the language north of Gauian⁵⁾.

No stone-work, no use of sacred plants, no prehistoric objects and no myths have been recorded in this region.

According to THURNWALD⁶⁾, the Banaro and their neighbours on the Lower Potter's River "were obviously exposed to waves of Melanesian invasions which have made themselves felt on the Sepik as well as on the neighbouring Ramu". Trading relations reach as far as the Lower Sepik, and the people of Tjimundo of the Lower Potter's River came originally even from the region near Marienberg⁷⁾, which is situated in the first culture province. It tallies with the character of the first two culture provinces that no traces of the stone-using immigrants have been found on the Potter's River either. Whether this, however, corresponds to the actual conditions, or is due to a gap in our knowledge can only be

1) LUSCHAN 502 104, RECHE 707 285 f. 2) 707 479. 3) 707 374, figs. 399, 400, quoted also by HADDON 711 1 341. 4) RECHE 707 53, 466. 5) BEHRMANN 57 308, 58 91. 6) 880 190. 7) BEHRMANN 59 334, THURNWALD 880 4, 886 346-355, 358.

decided by future investigation. We shall refer to this point once more in the discussion on the coiled pottery which is made in this region.

III. As already pointed out, the light-skinned and taller immigrants, according to RECHE, settled not only in the estuary, but particularly in the third culture province. Here the skin colour is really astonishingly light and as THURNWALD puts it, a "somatisch stark betonter Melanesischer Typ" is found here ¹⁾. Although the languages of this region are generally Papuan, it is of importance to note that distinctly Melanesian elements are also found not only in the vocabulary, but also in the grammar; and it is furthermore of great interest that the vocabulary shows many resemblances to the Melanesian language of Walis Island ²⁾.

It is well known that this third culture province harbours the most highly developed culture of the entire Sepik, and has attracted the attention of many students by its extraordinary richness. Here the artistic and highly developed coiled pottery is made, particularly the familiar large anthropomorphic urns; here also the big men's houses are found with their high gables, their deeply saddled roofs and decorations representing human faces on their frontal gables "an apotropaion, which reminds us at once of New Zealand, a reminiscence which is likewise evoked by the big house posts carved with human figures"; here also are found wooden trumpets which "are likewise reminiscent of New Zealand" ³⁾. According to NEUHAUSS these wooden trumpets prove that the inhabitants of this region are Melanesian immigrants ⁴⁾. As in Malekula, Santa Cruz and the Admiralty Islands, modelling of the skull is also practised in this region. The striking resemblance of the paintings on these modelled skulls with the tattooings of the Maori has been emphasized by several writers. NEUHAUSS ⁵⁾ thinks that they actually "point to connections with the Maori culture" and THURNWALD is of the opinion that "a wave of Polynesian immigrants may well have been driven to this region" ⁶⁾. It has repeatedly been seen in the course of this study that the so-called "Polynesian" influences pointed out by some writers were actually traces of the stone-using immigrants. Now, the conditions on the Sepik River confirm this view in an admirable way. Whereas no traces of the stone-using immigrants could be discovered on the Lower Sepik and its tributaries, many relics of the megalithic culture are found in this third culture province, the province of the "Polynesian" influence.

Only very little is known regarding trading relations. Such relations exist

1) THURNWALD 882 172, NEUHAUSS 603 128, RECHE 707 23, 54, CHINNERY 146 42.
 2) THURNWALD 882 172, BEHRMANN 58 61, RECHE 707 65, ROESICKE 736 508 f, BATESON 49 255, RAY 704 322. 3) LUSCHAN 502 104, 110. 4) NEUHAUSS 603 315 f; wooden trumpets are more widely known in New Guinea, and their geographical distribution is not uncharacteristic. 5) 603 167. 6) THURNWALD 880 34 Note 1; HAHN 325 20 speaks of Malayan influence. Regarding this culture see: NEUHAUSS 603 15, 235, RECHE 707 116-155, 363-373, 399, 426, 472, 474, 477, FINSCH 236 534, BEHRMANN 57 122, 231, ROESICKE 736 509 f, 514, etc. etc.

with the near bush people and the South-East River, and pots made in Eibom are traded within this region. The Iatmül particularly have relations with their northern neighbours the Mevambüt and Abelam¹), to whom we shall refer later on.

In many villages of the Iatmül who inhabit the greater part of this third culture province, upright carved monoliths were found standing in front of the big ceremonial houses. RECHE records that "In 293 kilometer village, in front of the fenced-in ornamental shrub (for this see later) we found something most extraordinary for this region, viz. three upright stones planted in the ground. The two outside stones were smaller and much weather-worn, and showed traces only of former carving. The middle stone, however, was well preserved and showed distinctly the carving of a human face. The features protruding plastically, showed round eyes surrounded by a circle, a fairly long nose the aleae nasi of which were formed of short spiral-like cushions, and a small oval mouth. The occurrence of these stones is all the more striking since in the wide alluvial plain not even small stones are to be found. These big stone-blocks have perhaps been brought from the Hunstein Range"²). In Mindimbit village "facing one of the ceremonial houses stood eight rough, unpolished stones. Seven were upright and slightly embedded in the ground and one was reposing. These rocks... were said to be of great antiquity... Each one had a name... Their origin is obscure"; similar standing "sacred stones" were seen in many other villages of this region. These monoliths, as almost all the other monoliths we have found so far in Melanesia, are said to represent the ancestors (called with a general term "kop", which included two other terms for ancestors "mbwan" and "angk-au") and prosperity is believed to depend upon them. The name with which these monoliths are called is "Kambak"³). This is so similar to "Ambat" or "Kabat" that I think it is more than pure coincidence. To-day, when a great man dies, a wooden figure is set up to represent him. For a woman also, a post (nggambut) is set up⁴).

Near these "Kambak" stones in front of the ceremonial houses, there is—very characteristically for this region—a ceremonial mound (the "Zierhügel" of some writers) called "Wak". This mound which is cylindrical with a circular section of about 7-8 feet, is surrounded by a fence of posts and bamboo stakes. Some of these posts have carved designs or a carved human face with a narrow nose and protruding eyes which, as in the case of the monoliths, are like round cushions with a slight depression in the centre. This method of representing the eyes is obviously identical with that found on the prehistoric mushroom-shaped stone of the Watut River,

1) CHINNERY 146 42, BATESON 48 144, text accompanying Pl. XV, 49 254, text accompanying Pl. II. 2) RECHE 707 149 f, Pl. XXXVI fig. 2, 708 73, ROESICKE 736 510, FINSCH 236 234, 242 96. 3) CHINNERY 146 41, BATESON 48 147, 147, 283, 49 258, 404 Note 18, fig. p. 260. 4) BATESON 48 48; WICHMANN's 939 186, information that the houses on the Lower Sepik were built partly of stone, is not confirmed by any other source of information and is certainly erroneous.

and the carved monoliths and upright gongs of the New Hebrides to which we have already drawn attention. On the "Zierhügel", variegated coloured ornamental shrubs are planted, dracaenas, short palms (cycas?) and "trees of totemic importance... the most conspicuous being the very tall (?) *Borassus* palms" ¹).

The heads of killed enemies were placed upon the standing stones, and in some cases their bodies were buried under these stones. (It will be remembered that the same custom was also found on Tiop Island). In other cases a portion of the flesh of an enemy killed is laid beneath one of the monoliths. But the flesh is not eaten. On the ceremonial mounds "Wak" too, the bodies of captives or captured heads of enemies are laid. The fleshy parts of the head or the body of a slain enemy are buried in the ceremonial mound. New initiates after having been scarified are carried twice around the "Wak" ²). This information is particularly interesting, since it reminds one of the connection with cannibalistic practices of the stone circles of the north-eastern part of New Guinea. We shall, however, see that there are good reasons for assuming that the stone-using immigrants were not cannibals. It is therefore possible that on the Sepik these customs are of an earlier origin and, in such regions where cannibalism was usual or was introduced later, have subsequently become associated with cannibalism. We shall refer later to the problem of cannibalism.

The ceremonial houses with the sacred monoliths and the "Wak" stand in a very spacious dancing ground, called wompunau. This dancing ground is a great park-like avenue of grass down in the centre of the village, 30 yards wide and several hundred yards long. The sides of the dancing ground are lined with mounds on which coconut palms, bananas, ornamental shrubs, such as crotons, etc. are planted ³). We shall repeatedly come across these spacious and beautiful park-like dancing grounds which form one of the most characteristic features of the interior of New Guinea. In most cases there is a very broad avenue leading to these dancing grounds, similar to the magnificent avenues encountered on Malekula, Vao, Uripiv, Saa, Ulawa, Vuatom, the Gazelle Peninsula, Rossel Island, and among the Mafulu tribe. At most of these latter places the avenues are bordered by monoliths, crotons, etc. The fact that also in New Guinea they are distinguished by stonework and the same sacred plants, leads to the conclusion that these avenues, as well as the spacious rectangular dancing grounds of New Guinea, were created by stone-using immigrants. These avenues actually differ so com-

1) In this information BATESON 49 258, has used the word "totemic" in a quite illegitimate manner; what he apparently means is that these plants have a sacred character. For the other data see: RECHE 707 148-150, Pl. XXXV, fig. 2, Pl. XXXVI fig. 3, Pl. XXXVII fig. 1, 2, 708 73, BEHRMANN 57 fig. p. 41, 58 Pl. VII fig. 2, 84, BATESON 48 text accompanying Pl. I, 49 258, fig. p. 260, ROESICKE 736 509 f, NEUBAUSS 603 58; 193 (1913) 345, 738. 2) CHINNERY 146 41, ROESICKE 736 513, BATESON 48 141, 283, text accompanying Pl. VII A; 193 (1913) 738. 3) BATESON 48 text accompanying Pl. I, 49 258, RECHE 708 73, VOGEL 911 294.

pletely from the usual narrow paths of Melanesia that their occurrence could be explained in no other way than as being due to foreign influence.

SPEISER, basing his assertions upon the occurrence on the Sepik and in Malekula of similar skull masks, anthropomorphic images, wooden masks, drums with anthropomorphic carvings, monoliths, etc. alleges that a direct migration took place from the Sepik to Malekula¹). In support of this opinion it may be added that nowhere else are the round beds of ornamental shrubs, modelling of the skull, the anthropomorphic carving, and the wonderful avenues of New Guinea found with precisely the same degree of resemblance as on Malekula, and the "Kambak" stones in all probability correspond to the Ambat or Kabat stones of Malekula. We have, however, seen, in the course of this study, that many of these elements occur also at other places. Monoliths with a human face carved on them have been found in Fate, Buin, and probably also in Saa, and non-anthropomorphical carved monoliths as well as plain monoliths occur at many other places. The wider use of broad avenues has just been mentioned; the modelling of the skull is also practised in the Admiralty Islands, and the wide-spread use of similar sacred plants need not be further emphasized. We have shown that these things are but elements of the great and complex culture of the stone-using immigrants which has overrun almost the whole of Melanesia, although certain traits of the megalithic culture of the Sepik undeniably show particular similarities with that of Malekula and its neighbouring islands. It is therefore possible that a certain wave of the stone-using immigrants migrated from the Sepik to Malekula, but certainly not in so direct a manner, as SPEISER supposes. Moreover, this wave, notwithstanding some peculiarities, must have possessed all the other elements which are at the same time characteristic of the megalithic culture in general, as is particularly evident from the uniformity of the myths. The following discussion on the interior of New Guinea will show that this wave was especially distinguished by a rich ceremonial life.

Among the elements of the "Polynesian" culture, RECHE mentions also wooden stools which were found in the third culture province but which are unknown in the rest of Melanesia²). These stools, which are to be found in every large ceremonial house, are carved "into some representation of totemic ancestors" and they are used only for debates. The speaker at the beginning of his speech strikes the stool with a number of bunches of dracaena leaves. Then he puts down the bunches on the stool, one by one, as if they were a tally of his sentences. When all are put down, he again bunches them together, and gives another single blow. This is repeated throughout the speech, ending with a final blow³). SPEISER⁴) expresses the opinion that these carved anthropomorphic stools are wooden imitations of stone seats such as are found with the Nagas and particularly on the

1) SPEISER 797 180, 182. 2) RECHE 707 483, 708 73, BATESON 49 259 f, 438.
3) BATESON 48 125 f. 4) SPEISER 804.

island of Nias. The distribution of these stone seats in Indonesia has been indicated by PERRY¹⁾, who has clearly shown that they are not only used by living people, but that the spirits of the dead also are believed to sit on them. The following spell of the Iatmul, pronounced by the magician for the healing of the sick, shows clearly that the wooden stools of the Iatmul were actually once stone seats and that, as in Indonesia, they were associated with the cult of the dead. The spell runs as follows: "Thou shalt not go. Thou shalt not die, youth. This is not the time when I shall take and bring and leave for thee a stone stool, a stone platform" 2).

Another interesting custom is the cutting of artificial dykes. In Darpoap, one of the Murik villages, an artificial canal had been dug by the natives to establish a water connection between the lagoon and the Sepik. It was two miles long and ten feet wide. Straight canals one or two yards wide, were also found near Singrin village on the Lower Sepik, and further artificial dykes were found with the Iatmul in the third culture province. These canals enable the canoes to go far into the country even in the dry season³⁾. Whether this was the original and only function of these canals we do not know. The distribution in Melanesia and on the Sepik of this type of earth-work, would be in favour of attributing it to the culture of the stone-using immigrants. It would be quite within the imagination that a sea-faring people like the stone-using immigrants attempted in this way to overcome the unusual difficulties of fluvial navigation. In the following, we shall come across a number of draining ditches in those regions of New Guinea where the influence of the stone-using immigrants is clearly apparent, and it will then be possible to give a more definite answer to the question as to whether this earth-work forms part of the culture of the stone-using immigrants.

Sacred Plants. It has been seen that in the first two culture provinces of the Sepik, where no traces of the stone-using immigrants were found, the use of sacred plants was also found to be non-existent, whereas evidence of their use was again apparent in the third culture province where the presence of the megalithic culture was clearly manifest. To the data already mentioned we may add that among the Iatmul it is customary to send dracaena leaves as a token of invitation; boys wear loin tassels of dracaena leaves; an apron of stripped dracaena leaves denotes reprehension for a man who had never killed. In the magic for the healing of the sick, a spell is pronounced over a dracaena leaf. According to BATESON, dracaena leaves were used during a speech at the stool as previously mentioned "because of the ceremonial associations of the dracaena". BATESON gives a picture of a man with evodia leaves pendant on his head⁴⁾.

Prehistoric objects. It is highly characteristic that prehistoric

1) 651 33-39. 2) BATESON 49 418. 3) SHURCLIFF 782 216, VOGEL 911 272, BATESON 49 251 f, RECHE 708 70. 4) BATESON 48 126 Note 1, 139, 49, 260, 276, 283, 415, Pl. I.

objects not recorded from the first two culture provinces, were found here. In the neighbouring Hunstein Range, i.e. the region from which the stone for monoliths seemed to have been brought into the alluvial Sepik Valley, a stone mortar was found "far away from any human habitation in the forest... between two upright standing stones" ¹⁾. It is to be regretted that nothing more is said regarding these upright stones; but in view of the occurrence of monoliths in the neighbouring Sepik region of the Iatmül, I do not doubt that these stones were monoliths too. It is very significant therefore that the stone mortar was found between these two stones. Three stone pestles were found in the region of the Iatmül, and BATESON ²⁾ records that "such pestles were common on the Sud River (which in the region of the Iatmül falls into the Sepik), and were used in cooking".

It has been seen that one name for the ancestral spirits of the Iatmül was "angk-au". Now, BATESON tells us that "angk-au" literally means "potsherds" and he adds the explanation "hence ancestral spirits are symbolised by the old potsherds under the house" ³⁾. Unfortunately, this remark is not precise enough to determine with certainty whether we are confronted here with "prehistoric" potsherds.

Mythological evidence. BATESON has recorded a few of the myths of the Iatmül which are of the greatest interest to our problem.

There is a series of tales of two brothers: Kamwaimbuangga the elder was the discreet type, while the younger, Wolindambwi, was a man of violence. It is the latter who is the great hero. This hero is said to have been a man of great beauty and especially to have had a long nose which was much admired. Among his beautiful descendants they counted Mwaim-nanggur. This hero had a beautiful nose too, and he originated the process of extracting sago. All the women loved him and he copulated with them all. Mwaim-nanggur was murdered by the husbands of the women ⁴⁾. Unfortunately, BATESON gives no further details about these two antagonistic brothers, but it is significant enough in itself that their story appears here again. That the heroes had long noses apparently points to the fact that they were non-Papuan in race, and further agrees with the long noses on the monoliths and the carved posts mentioned. One of them, Mwaim-nanggur, is characteristically credited with the introduction of the use of sago, as was Tenal-Pisin of the northern coast of New Guinea and the other representatives of the stone-using immigrants who were described as being the introducers of food plants. The theme of the copulating with the women occurred in a similar way in the myth of Inuvaylu'a of the Trobriand Islands, and that of Mau of the Kai of the Sattelberg, whose relation with the Ambat myths has already been mentioned. BATESON ⁵⁾ furthermore makes the very important remark that "the scented and decorative plants

1) ROESICKE 736 510. 2) 497 427. 3) BATESON 48 281. 4) BATESON 48 162 f, 192. 5) 49 443.

are associated with the hero Mwaim". This gives additional strength to the view that this hero was a stone-using immigrant.

Floating islands are called "agwi" by the Iatmül. A few myths ascribe the origin of dry land to "agwi" attached to the bottom of lakes by the roots of trees¹). It might be asked whether this belief is not a remote reminiscence of the creation of islands so often associated with the stone-using immigrants, and a habitat which, in the history of this people, may have preceded their settling on the mainland. In this connection, it is very important to note that BATESON says of the Iatmül: "Even in former times they knew of the sea, and even vaguely realized that currency shells (which are used by them) were a marine product. I have a myth which accounts for the rolling of the sea"²).

The most important type of spiritual beings are the "wagan", who have big noses and are mythologically connected with water. In a certain rite, in which the wagan are impersonated, they are decorated with croton leaves, wearing a fish net in which the wagan were raised from water in their mythological origin³). One of the most important wagan is Kava-mbuangga, who also played a certain part in the creation of sky and earth. He set his foot on the mud, thus hardening it, and thereby created dry land⁴). This, besides the other traits recorded, allies him to the other stone-using immigrants who, by their treading on the ground, became the physiographical shapers of the country. This impression is still further strengthened by an image of him painted in two colours, the right-hand side of the figure in ochre to represent living flesh, and the left-hand side in black to represent stone⁵). It would be desirable to know more of this character.

We must now ask whence this megalithic culture of the third culture province of the Sepik originally came. THURNWALD, RECHE, and NEUHAUSS are of the opinion that the Melanesian immigrants penetrated into the country by migrating up the Sepik River⁶). BEHRMANN discovered strong resemblances between the languages of several Sepik villages and those of the coast villages which lie almost exactly to the north of the Sepik villages in question, and the linguistic affinity of the third culture province of the Sepik with Walis Island has already been mentioned. BEHRMANN consequently assumes that the immigration to the Sepik started directly from the northern coast passing over the coastal mountains or through the gaps between them (between the Torricelli Range and the Prince Alexander Range, i.e. the mountainous region of the Arapesh, or east of the Prince Alexander Range). He thinks that, for a sea-faring people, the Sepik cannot have been a practicable way of penetration; here they would have been unable to make use of their mode of travelling, since on a river one can only travel without sails, against the current, with poles, and in dug-out canoes⁷);

1) BATESON 49 252 f. 2) BATESON 49 255. 3) BATESON 48 55, 137, 168, 233, 286, Pl. XVIII B, Pl. XXXVIII A. 4) BATESON 49 252 f, 400 f. 5) BATESON 48 233. 6) THURNWALD 882 172, RECHE 707 483, NEUHAUSS 603 128. 7) BEHRMANN 57 309, 58 122.

and there are actually good reasons for assuming that the stone-using immigrants used big overseas canoes with outriggers and sails. Now, according to the Iatmül belief, the country of the dead is in the east, and the souls accordingly, voyage down the Sepik¹); but we do not know to which element of this undoubtedly mixed people this belief belongs. Furthermore, whatever may have been the route followed by the Melanesian immigrants, it does not necessarily mean that the stone-using immigrants also went the same way; for, although both these peoples belong to the Austronesians, they are by no means identical. Now, it has been seen that in the first two culture provinces of the Sepik, where Melanesian elements were traceable, no vestiges of the stone-using immigrants were found. Though it is therefore quite possible that the immigrating Melanesians penetrated into the interior of the country by proceeding up the river, it is highly improbable that the stone-using immigrants did so. This conclusion agrees completely with our deductions regarding the Markham River. There too, Melanesian elements were found far up the river, but no traces could be found of the stone-using immigrants. These latter, it will be remembered, were not discovered until we came to the area of the Kukukuku, so that we have considered the Upper Waria as the probable source from which the culture of the stone-using immigrants came to the Kukukuku. We have therefore drawn the conclusion that although the Markham was actually a highway followed by the immigrating Melanesians, it was certainly not the way taken by the stone-using immigrants. The opinion generally held up to the present that the big rivers always form the most natural mode of penetration into the interior of a country, is not confirmed by the information we have gathered. This view at least, does not apply to the migrations of the stone-using immigrants.

In order to elucidate the question whether the megalithic culture came to the Sepik from the north, we must now investigate those cultures which are found north of the third culture province of the Sepik, viz. the Mewambüt Abelam, and Arapesh.

Mewambüt and Abelam: Trading relations of the Iatmül with the Mewambüt and Abelam have already been mentioned. The language of the Mewambüt is in fact related to the Iatmül language, and there is a hole in their country from which all the peoples are believed to have originated²). There are so far no further records regarding them.

The northern neighbours of the Mewambüt, the Abelam, are of short stature, dark-skinned, and have Papuan curved noses; but "others, possibly revealing a Melanesian influence, are almost honey-coloured"³). Their non-Melanesian language, which is different from that of the Arapesh, has

1) BATESON 48 47, 49 418 Notes 37, 41. 2) BATESON 49 254. 3) KABERRY 423 238 The term "Melanesian" as a designation of the race is not uniformly used by the various writers. The inclusion of light skin, however, in the term "Melanesian", is certainly misleading.

"some affinity with the Iatmül language", but culturally they show affinities with the Iatmül and with the Arapesh as well; thus, for instance, some kinship terms are the same as in Iatmül, and the upper part of the facade of the very high men's houses are painted with human faces; the initiation ceremonies, on the other hand, are similar to those of the Arapesh¹). Besides trading relations with the Iatmül already mentioned, they have also similar relations with the Arapesh. Through this territory run three principal trade routes, along which passes all traffic in material culture, sorcery, and ceremonial. In this way many cultural influences, such as for instance, some features of the initiation, came to the Arapesh from the Sepik²). Thus, an uninterrupted connection is established from the Sepik to the Arapesh of the coast, and if it be true that trading relations are indications of ancient culture contact we may take these facts as strongly suggestive.

For the Abelam the dancing ground (*amei*) is the focal point of social life. It is a large cleared space about 50 feet by 50 feet. The dominating feature is the ceremonial house. In the *amei*, dances are held around the white stone in the centre, called the *mbabmu-matu*, or moon stone. On the outskirts are plants used for ornaments and magic, and near the ceremonial house there are often "curiously shaped" stones believed to be the incarnations of the "wale", the spirits of the streams and springs³). The road is bordered by hibiscus, crotons, coconut palms, and areca palms⁴). Although it is not definitely stated, it is not improbable that these roads are avenue-like. It might further be added that cordyline is also planted along the road, to assert claims over land which has not been cultivated for some years⁵). The Abelam believe that it is the "wale" who made their country⁶), but it is to be regretted that nothing else is recorded about them. It is, however, apparent that these spirits of the streams, "wale", who inhabit the monoliths correspond to the "wagan", the spirits of the water on the Sepik, one of whom was the hero Kava-mbuangga.

Arapesh: This big tribe (Beach, Mountain, and Plain Arapesh) which extends even as far as the coast speaks a non-Melanesian language⁷); but the Abelesihim and the Nugum have a language "which according to native testimony is also spoken on "Walis" and is related to the Iatmül language"⁸). The very marked difference between the lighter skinned, less hairy Beach people who show apparent similarity to the Melanesian speaking peoples of the islands, and the short, squat, hairy people of the Plains, is less distinct among the Mountain peoples. On the whole, they are a small people, with occasionally, much taller individuals. In colour they vary from almost black to a skin almost light enough for a Malay. The same variation

1) KABERRY 423 233 f, 236, 243, 248, 261 Note 45. 2) KABERRY 423 352 Note 27, MEAD 540 37 f, 541 242-244. 3) KABERRY 423 242 f, 348, 365. 4) KABERRY 423 239. 5) KABERRY 423 348. 6) KABERRY 423 346. 7) MEAD 540 38. 8) MEAD 539 321.

is found in feature. In physique also, the men vary from the little leptosome type to the more long-waisted pudgy type. The hair is prevailingly coarse, black, and frizzy. Newborn infants have soft hair which is sometimes light brown in colour¹). Apart from relations within the tribe and with the Sepik passing through the country of the Abelam, the Beach Arapesh have trading relations with the Melanesian speaking peoples of the outlying islands, and also with Murik and Suein; the beach villages furthermore form a link in the long chain of trade from Aitape to the Sepik²).

The Arapesh have the same park-like dancing grounds as the Abelam and the Iatmul, the only difference being that they are smaller; but this is due to the exceedingly precipitous character of the country, villages being located on summits of razor-backed ridges which are only very slightly levelled. On these dancing grounds called "agehu", a few ancestral stones are standing in a row, the tallest of which is only a foot high. Around the "agehu", and to the very edge of the precipices grow a large number of sacred and useful plants and shrubs, plants used for magic, as dyes, as decorations, and in ceremonies. On the "agehu" itself, a small men's house is built. A number of coconut palms also are planted on these dancing grounds. Around the foot of the palm trees are raised mounds, one for each tree. MEAD remarks that "the little mounds about the foot of each palm tree are the only resemblance to the elaborate village plan of the Middle Sepik"³). There, it will be remembered, the mounds on which coconut palms, ornamental shrubs, etc. were planted were along the sides of the dancing grounds.

Sacred Plants. In addition to the use of the sacred plants already mentioned, we may add that the graveyards (which owe their origin to the Government's supervision) are fenced off and ornamented with croton; an Arapesh who wishes to bind another over to peaceful intent, merely ties a green croton leave in a simple knot; when an Arapesh wishes to express his determination to have nothing to do with a certain relative, he ties certain croton leaves together over his door.⁴).

Thus, since the same traces of the stone-using immigrants occur here as with the Abelam and on the Middle Sepik, and since the general culture, language, race and trade all point clearly to relations linking the north with the south, we may conclude that the penetration of the stone-using immigrants into the interior of the country started most probably from the northern coast. Numerous myths have already been mentioned proving the influence of the stone-using immigrants on the northern coast.

The Upper Sepik as far as the Yellow River: In the fourth culture province of the Sepik, where the culture is much poorer and where model-

1) MEAD 539 209 f. 2) MEAD 539 176, 182, 191, 226, 231, 258, 303, 314, 316-318, 320 f, 326, 328 f, 332, 335, 540 37. 3) MEAD 539 202, 205, 237, 269, fig. 15. 4) MEAD 539 193 f, 207.

ling of the skull, for instance, is not practised ¹⁾, the people are short, darker-skinned, frizzy-haired and have curved Papuan noses ²⁾. Papuan is the only language spoken here ³⁾. This shows how distinct the differences are in culture, race and language between this and the third culture province of the Sepik ⁴⁾.

It is significant that no traces of the stone-using immigrants have been recorded from this culture province. This region, as far as Mt. Meander and Yellow River, is of no particular interest for us, and in fact very little is known regarding it. Later on, we shall continue our investigation from the Yellow River onwards; but now we shall turn first to the study of the Ramu and then proceed to the interior of New Guinea, i.e. those regions where the megalithic culture shows strong resemblances to that of the Middle Sepik.

Ramu River: We know nothing regarding the racial characteristics of the lower Ramu. FINSCH ⁵⁾ calls the inhabitants of Venus Point at the Ramu estuary "pure Papuans" which is, however, too great a generalization. The Ramu River people of Atemble, Asaingida, etc. are tall, of very dark skin, have aquiline noses, and thick lips ⁶⁾. Further up the river, the Wodsa show two different elements; their stature varies from 4½ to 6 feet, the skin from light to dark brown, and the nose is broad or aquiline. LAUTERBACH says: "I should like to consider these natives as a mixture of the aboriginal mountain tribes and the coastal tribes which immigrated along the river valleys" ⁷⁾. His first opinion that the Wodsa are a mixed race is probably accurate, and we shall come across light-skinned elements in the Schrader Range, the Bismarck Range, and particularly on the headwaters of the Purari; LAUTERBACH's second opinion that an immigration of the coastal people up the river valley took place, would be of particular interest for us, but cannot apply to the lighter skinned people. If the lighter skinned elements are really due to racial mixture, they cannot have come from the Lower Ramu, since up to the present nothing is known there of light-skinned elements.

No stone-work is recorded from the Ramu River.

Sacred Plants. Very little is recorded regarding sacred plants. In Iringjabi village, a little lower down the river than Atemble, the road was decorated with croton shrubs; in Sanagol village, near Atemble there were "variegated coloured shrubs about the houses"; near Atemble itself, variegated leaved crotons in the forest often indicate former places of habitation, and the same is the case a little higher up the river than Atemble; a little lower down the river (at the points designated on BEHRMANN's map "19th and 21st October") many hibiscus plants were grown along the river

1) WHITING-REED 937 209 Note 31. 2) WHITING-REED 937 172 f, SCHULTZE 839 70. 3) WHITING-REED 937 177, RAY 704 322. 4) See also THURNWALD 879 74. 5) 236 294. 6) MOYNE 588 168 f. 7) LAUTERBACH 463 56.

banks and also in the gardens; hibiscus and erythrina were growing on the Upper Ramu, and a croton was found growing near an old tumble down hut (on GEHRMANN's River "A") 1). At a peace-making ceremony on the headwaters of the Ramu, the women twirl green and white crotons between the palms of their hands; pigs are slaughtered, an arrow is broken over their bodies and the blood sprinkled over two branches taken from the croton plant. These croton branches are planted in each village, and, as long as they grow, fighting is taboo 2).

Prehistoric objects. A stone mortar was found in Edie Creek Ramu River. A stone pestle and mortar were found in close proximity on the Infuntera Creek, Upper Ramu River. The mortar is of granite, the pestle of phyllite 3).

These data are as scanty as is our knowledge of the general culture of the Ramu. It is, however, evident that the stone-using immigrants did not penetrate into the interior from the coast by migrating up the river. On the contrary, it is much more likely that the prehistoric objects, the use of sacred plants, and the few lighter-skinned elements of the Upper Ramu are due to contact with the tributaries of the headwaters of the Purari, perhaps with the tributaries of the Wahgi River and thus perhaps also with the Wahgi itself; in all these regions many light-skinned elements, the use of sacred plants, prehistoric objects, and many other proofs of the presence of the stone-using immigrants are to be found.

The Atemble region may furthermore be assumed to have been subjected to some influence from the Potter's River which, near Atemble, runs very near the Ramu River. On the Ramu somewhat higher than Atemble, GEHRMANN found plaited sleeping bags like those found on the Sepik. We know that these bags are traded from Kumbragumbra on the Sepik up the Potter's River 4). Now, GEHRMANN's opinion regarding the Ramu is that "the entire culture observed here points to a connection with the Sepik tribes" 5). Although it is certain that there is such culture contact, and although Melanesian influences have very probably been at work on the Potter's River, it is quite improbable that the few elements we have mentioned and which indicate some influence of the stone-using immigrants, could be traced to the Potter's River; for these elements are non-existent on the Potter's River and in the two corresponding culture provinces of the Sepik (culture province I and II). On the other hand, it should be noted that the Atemble and Asaingida people have trading relations with the Aiome pygmies. Thus many articles of the Aiome reach the inhabitants of the Ramu, and even racial intermingling has taken place 6). The Aiome pygmies are actually the smallest people yet recorded from New Guinea. With their very light skin, frizzy hair, broad straight noses and thin lips they are generally considered

1) GEHRMANN 278 13 f, 21-24, 28. 2) AITCHISON 14 479 f. 3) MILES 573 185, fig. 1, 574 96, fig. 1. 4) THURNWALD 886 360. 5) GEHRMANN 278 27. 6) KIRSCHBAUM 431 204 f, 208, MOYNE 588 169, 172 f, 589 270 f, 274, TISCHNER 893 61.

as typical mountaineers¹⁾, in whose region no material traces of the stone-using immigrants have been found up to the present. But their custom of tattooing which is otherwise found only on the coast, and most particularly the suffixing of the genitive²⁾ certainly reveal more recent influences. Even more important is the fact that the Aiome have battle axes, which they say are made by themselves, and which are almost completely identical with those of the Mt. Hagen region³⁾. HADDON is of the opinion that these axes were either copied from the Mt. Hagen axes, or that they have simply been traded from there to the Aiome⁴⁾. However this may be, relations with the Mt. Hagen region must be taken for granted. Since in the Mt. Hagen region there is clear evidence of the presence of the stone-using immigrants, and since there are good reasons for attributing the well known battle axes of the interior of New Guinea to the megalithic culture, it is quite possible that the occasional use of sacred plants on the Ramu also came from the Mt. Hagen region through the intermediary of the Aiome. It must, however, be remarked that the sources of information do not record any use of sacred plants by the Aiome themselves. It is furthermore recorded that the Kunimbi who inhabit the Wahgi Valley, trade with their neighbours across the Bismarck Range⁵⁾; we do not know how far these trading relations extend, or in which direction they go, but the possibility of the Aiome having also been influenced from this direction should not be excluded. This is all the more important since, as we shall show, the presence of the stone-using immigrants in the Wahgi Valley is beyond doubt.

We thus obtain the same result regarding the Ramu River as we have obtained for the Sepik and the Markham, viz. that these largest rivers of the Mandated Territory were not used by the stone-using immigrants as a means of penetration into the interior of the country.

We now continue our investigation in the Mt. Hagen District and the Bismarck Range, areas which, contrary to earlier suppositions, have been shown by more modern observers to be inhabited by an exceedingly large population.

Mt. Hagen: The Mt. Hagen people about whose language we have no detailed information, are of medium stature and brown of skin⁶⁾. No further data are recorded, as far as I can see. Direct trading relations do not extend very far, reaching Rogaka and Jimi River in the north-east, Pim River in the east, Kumdi in the north, Munjiger in the north-west, and the Nabilya River in the south. From the Nabilya River a big trade route runs into Papua—probably the main Papuan coastal trading route inland—along which shells and steel axes have come inland. Other

1) MOYNE 588 172-176, 182, 589 207 f, 274 f, TISCHNER 893 61, BRAUNHOLTZ 91, 95, KIRSCHBAUM 431 204, 206, 208. 2) KIRSCHBAUM 431 209, 213. 3) KIRSCHBAUM 431 210. 4) HADDON in MOYNE 588 XXII f. 5) CHINNERY 143 119. 6) CHINNERY 143 120 f, LEAHY and CRAIN 474 253.

shells are supposed to have come from the Sepik up the Yuat Valley ¹).

The most remarkable feature of the Mt. Hagen District is the oblong park-like dancing grounds. They are about 150 yards long, and 18 yards wide levelled off by digging away any high portions and building up the low portions with the dug-out earth. The area is then planted with grass to form a lawn. The borders are lined with ornamental and flowering trees and shrubs of all colours, dracaenas, casuarinas, etc. At the upper end of the dancing ground is the men's house. Whenever the soil had been excavated to the level of the dancing ground, the earth was banked up around the house and the embankments planted with various bushes. Down the centre in a straight line at intervals of 20 feet were set four structures of bark and timber, about 3 or 4 feet high, and filled in with earth. These mounds are planted with brightly coloured flowers, ornamental shrubs and casuarina trees. Around these plants also dracaenas are planted. Leading up to the lawns from every direction for a distance of half a mile are pathways up to 4 feet wide with ornamental trees and shrubs planted on either side. Driven into the lawn in perfectly straight rows are stakes down the whole length of the ceremonial ground and even farther. To these stakes pigs are tied at the big feasts at which many pigs are killed. In one case no fewer than 1100 pigs were killed. In the men's house "are stored, during the feast only, the gold-lip shells and treasures, etc. of the people who congregate in thousands to march round and display their wealth" ²).

From this it is clearly evident that these park-like dancing grounds correspond completely both in shape and decoration to those of the megalithic culture of the Middle Sepik, the Abelam, and the Arapesh. The ceremonial mounds here are also identical with the "Zierhügel" of the Sepik, and the wide avenues occur here again too. It has already been seen that, besides their occasional occurrence in other parts of Melanesia, these elements are found particularly in the New Hebrides. This corresponding to the New Hebrides is particularly strengthened by the fact that here again we find big pig feasts, which show their highest development in the New Hebrides; here again too, we find the artificial levelling of the dancing grounds and, what is still more important, also the wooden stakes in front of the men's houses, to which the pigs to be killed are tied. We shall come across this custom in San Christoval and in Kurtatchi, but we have not come upon it in the rest of Melanesia except in the New Hebrides, where it is very frequently found, and highly characteristic. In view of these particular resemblances with the New Hebrides, LEAHY's information that the shells and treasures are stored in the men's house and displayed "during the feast only" is all the more important. Graded societies, in which

1) ROSS 744 347, 351-353, VIAL 904 158, 162, LEAHY and CRAIN 474 247. 2) LEAHY 473 243, ROSS 744 343, 350, Pl. V fig. 9, 10, WILLIAMS 953 94 f, fig. 4, CHINNERY 143 120, 153 409, MURPHY 594 38.

progression is acquired by the killing of pigs are known in the New Hebrides, but in no other part of Melanesia. It may be that the information furnished by LEAHY is inadequate, as he has not studied the social organization. But even if it were complete I think it would be permissible to see in this display of treasures and the killing of pigs traces of social competition which, in the New Hebrides, appear as analogous competitions in the graded societies which are governed by definite rules. This would not only be additional proof of the cultural connection between the Sepik and the interior of New Guinea on the one hand, and the New Hebrides on the other, but it would furthermore show that this wave of the stone-using immigrants did not come only to Malekula, but reached the other islands of the New Hebrides as well, since there is nothing to prove that Malekula was the centre from which this culture subsequently spread over the entire archipelago of the New Hebrides; finally, it is evident from the data quoted, that the migration of this culture cannot have taken place in the direct way as SPEISER has suggested.

In the following discussion we shall show how far the megalithic culture has spread into the interior of New Guinea; but it must be borne in mind that this part of New Guinea has only recently been opened up and that investigations are still in its infancy ¹⁾.

Another very characteristic feature is the highly developed type of agriculture with its artistically arranged gardens. In the Mt. Hagen region, the gardens are divided into squares by means of shallow draining ditches about 10 inches deep and 10 inches wide. But there is no irrigation ²⁾. Since the geographical distribution of these chessboard-like gardens separated by draining ditches corresponds, as will be seen, to the traces of the stone-using immigrants found in this region, we can conclude that the stone-using immigrants were their introducers. If the number of food plants introduced into Melanesia by these immigrants is borne in mind, it is not surprising that they were responsible also for this highly developed type of agriculture. Some writers seem to be uncertain of the purpose of these ditches. The majority has considered them as draining ditches. As regards the "Grasslanders", WILLIAMS has discussed this question in more detail, and he is inclined to believe that they are intended as draining ditches. But elsewhere ³⁾ he expresses the following opinion regarding the agriculture of this region: "In between the plots the earth has been scraped off down to the bare clay, so that they are clearly separated... The plots ran in lines side by side... so that the strips of bare earth which separated them has almost the appearance of drains. While the method described is really meant, I imagine, to make the best use of all available humus, the

1) It should not be overlooked that most of the following information regarding the interior of New Guinea has been furnished by patrol officers and miners like LEAHY. The merit due to these "outpost men" cannot be overestimated, and every student of New Guinea should recognize his indebtedness to them. 2) WILLIAMS 553 59 f. 3) 712 (1938/39) 44 f.

spaces between do of course serve as drains also, especially on the slopes". If therefore, they can be defined as draining ditches, a definition which might be admitted in the case of swampy alluvial regions, WILLIAMS thinks that this cannot be the case for the mountainous districts like Mt. Hagen for instance. "Drainage" he says ¹⁾ "may indeed have been the long ago reason, but the practice is nowadays continued on the higher parts of undulating ground, where the floods could not do actual damage".

Sacred Plants. To the information already given regarding the use of sacred plants, it can further be added that dracaena and other ornamental shrubs and flowers are grown in the gardens and that the men wear dracaena leaves in their belts ²⁾.

Prehistoric objects. It is highly characteristic that prehistoric objects have been found here again. An old stone mortar was found at Gimgar near Mt. Hagen, and another stone which looked like an old stone oil lamp was found at Iramdi. Their use was not known to the present people, but they were regarded with reverence ³⁾. According to information given by Murphy, the Mt. Hagen people have "some fine specimens of stone vessels" ⁴⁾. MURPHY does not describe their shape, but records that at the big pig feasts pig meat is piled on these vessels. "When not in use, these vessels are buried in a secret place" and brought out at the time of the feast ⁵⁾. This information is not without interest, for, apart from natural causes responsible for the fact that many of these prehistoric objects were found beneath the surface of the ground, there is the possibility which should not be excluded that, in some cases at least, their position beneath the surface is due to this practice of burying them.

Mythological evidence. It is much to be regretted that our knowledge of the myths of this region is so limited. The story of the origin of the Mogei, who live south-east of Mt. Hagen at the headwaters of the Wahgi, is therefore all the more important for us. This story runs as follows: At a place to the north lived two men. The place was Maip. One man was called Maip Mo and the other Debi-Kuibi. The two men planted a garden. One day they spied a big tree called korup. Maip Mo said to Debi-Kuibi: "Go and get some firewood from that tree". Debi-Kuibi climbed the tree and broke off every one of the branches. When Maip Mo saw this, he was angry and said: "Why did you break off all the branches?" So they quarrelled and separated, Maip Mo going south and founding the tribe of Mogei⁶⁾. The quarrel of these two men and their final separation obviously resembles the numerous stories of the two antagonistic brothers of

1) 953 95 f, see also TISCHNER 893 51 f. 2) WILLIAMS 953 91, 95, ROSS 744 344.
 3) CHINNERY 143 121. 4) They are called "kuru" which word strikingly resembles the Indonesian and Melanesian word for pot: kure, kura, kuro, kuru, kulo, uro, uru, etc. For the distribution of this word see SCHURIG 841 205, 208-214. MURPHY, however, declares this word to be an abbreviation of the word "kuruku", which means "spirit stone". MURPHY 594 38. 5) MURPHY 594 38. 6) ROSS 744 354 f.

the stone-using immigrants, although in the present story the two men are not said to be brothers. The statement that the man who founded the Mogeï tribe came from the north, corresponds strikingly to what we should expect. It has been seen that the megalithic culture of the Mt. Hagen District agrees with that of the Middle Sepik, a fact which alone would be sufficient to suggest a culture contact between these two regions. It has furthermore been seen that certain shells of the Mt. Hagen area were supposed to have come from the Sepik up the Yuat River, and it has repeatedly been found that trading relations were important indications of former migrations of cultures. But there is still another and very important argument in favour of an immigration of the stone-using immigrants from the north. We have already reached the conclusion that the immigration of the stone-using people into the area of the Middle Sepik was similarly due to a north-south migration which, starting from the northern coast, passed through the area of the Arapesh and Abalam until it reached the Middle Sepik. There is no reason for supposing that the migrations of the stone-using immigrants came to a halt on the Sepik. Now if, after their departure from the Sepik, these people continued their migrations in accordance with their north-south tendency, they must have reached the Mt. Hagen District situated somewhat to the south-east of the Middle Sepik. If this migration actually proceeded along the same way as the shell trade, it is probable that it likewise followed the Yuat River which, north of Mt. Hagen, flows in a south-north direction. For these reasons I am of the opinion that the stone-using immigrants migrated into the Mt. Hagen District from the north.

BROOK D'OBRENAN records a myth of the Kambriman tribe on the Sepik which is of particular interest to us. I am not sure, however, about the exact position of the Kambriman. Is Kambriman identical with Kambrinum which, according to SCHULTZE and RECHE, is identical with Kambringi? Kambringi lies somewhat to the east of the point where the Yuat joins the Sepik, i.e. in the second culture province where, so far, no traces of the stone-using immigrants have been found. But the existence at that place of a myth containing themes belonging to the mythology of the stone-using immigrants, would give further support to the view that the migration of the megalithic people actually went along the Yuat River. On the other hand, it must be noted that SCHULTZE has identified Kambringi with Moangri¹⁾, which is actually in the third culture province. If this identification is right, the existence of this myth here would correspond to the obvious presence of the stone-using immigrants in this area. The myth runs as follows: Once there was a woman called Yam who lived with her sister Kamba and her little son Enaja. One day, when Yam was absent, Kamba spat betel on the body of Enaja, so that the child began to grow very quickly, and then he began to walk and even to run quickly. He made himself weapons and killed a hornbill and a pig. Then he made a

1) SCHULTZE 539 Map, RECHE 707 38.

drum. When, with his arm he measured the depth of the hole he had carved out, his uncle watched him. Then Enaja told his uncle to measure the hole himself, and when the uncle bent down and his arm was deep in the hole, Enaja killed him and cut off his head. From this day the Kambriman have been head-hunters. Once a heavy rain began to fall, so that the river overflowed its banks. So Enaja and the two women were forced to take refuge in the high branches of a casuarina. Then the tree began to grow very quickly until its top reached the sky, after which it shrank again. But Yam, Kamba, and Enaja remained in the sky and, adds the myth, Enaja is the sun, Yam the moon, and Kamba the aurora ¹). Here again we find the theme of the miraculously fast growth of the child, and the killing of certain animals reminiscent of the destruction of the man-eating animals in the other analogous stories; the killing of the uncle at the moment when he put his arm into the hole is certainly reminiscent of the killing in the hole into which, in the other analogous stories, the victim is ordered to descend. The heavy rainfall causing the overflow of the river, reminds one in some way of Qat, who made the rain fall, thus creating a river on which he then departed; also the themes of the lengthening of the tree and the ascension into the sky occur here again, and it is significant that this tree is a casuarina as it was the case of Qat and some other heroes whose association with the stone-using immigrants we have shown.

Nabilya River and Kagole River: The two rivers Nabilya and Kagole ²) rise in the Mt. Hagen District, but in their course they reach Papua ³). On these rivers also a large population was found ⁴), which, in spite of some differences in the material culture, is nevertheless similar to the people of the Upper Wahgi and speak the same language ⁵). The important trade route in the Nabilya District leading to the south, along which iron axes came into the interior from the coast of Papua ⁶), has already been mentioned. Apart from this, nothing is recorded regarding trading relations.

On the Nabilya and the Kagole Rivers, the same park-like dancing grounds planted with the same typical plants were discovered, as in the regions previously mentioned. In Vega village, somewhat north of the Kagole Valley, the ceremonial mounds in the centre of the dancing ground were 4 feet 6 inches to 5 feet in diameter and 3 feet 6 inches to 4 feet high. Since this village was situated at 6,500 feet on the top of a ridge, this ridge for a distance of over half a mile had been levelled off to a width of a

1) BROEK D'OBRENAN 98 213-215. 2) Whereas LEAHY speaks of a river Gauil and another river Kaugel, see also his map in: LEAHY and CRAIN 474, CHAMPION, 136 248 f, see also CHAMPION's map, considers them as one and the same river, which he calls the Kagole. 3) The maps of LEAHY and CHAMPION differ also in this respect. According to LEAHY these two rivers penetrate much deeper into Papua. 4) LEAHY and CRAIN 474 182, LEAHY 473 250 f. 5) LEAHY 473 251, LEAHY and CRAIN 474 201, 231, 233, 235 f, 276. 6) LEAHY 473 251, LEAHY and CRAIN 474 204, 234.

chain or so to form the lawn¹). In describing the ceremonial grounds of the Nabilya River, LEAHY and CRAIN make the following remark, which is of inestimable value for our problem: "In one of the sing-sing grounds I noticed two things that archaeologists of the future may do a good deal of puzzling over, a rather well-made stone mortar for grinding grain, and a number of broken pieces of pottery. These objects were arranged as curios on a small, fenced-in mound in the centre of the ceremonial ground. Since the present inhabitants grow no grain and make no pottery, these articles may well point to the existence of an earlier and more advanced race. I have since observed a number of such relics in this area, regarding which the present inhabitants could tell me nothing. The following year I dug up a very good stone mortar of similar type which had been buried under several feet of volcanic tufa"². I think, we have found in the present work a solution to this archaeological puzzle. Not only is it highly suggestive that the stone mortar and the prehistoric potsherds were arranged together on what apparently is one of the ceremonial mounds, since we have found them all to belong to the megalithic culture, but the very fact that here again potsherds were found, is a new proof of the cohesion and relative uniformity of this culture of the stone-using immigrants in Melanesia. We can ignore the opinion expressed by LEAHY that the mortars were used for grinding grain.

On the Kagole as well as on the Nabilya River "draining" ditches were again observed³).

Wahgi River: This densely populated area "with its tens of thousands of inhabitants" extends east of Mt. Hagen⁴), and we are fortunately very well informed regarding it. The people here are very tall, well built and very good looking. VICEDOM is of the opinion that three different types can be distinguished: 1) very tall and slender people with long faces, 2) small, sturdy and broad-faced individuals, and 3) people with reddish-yellow skin generally of medium size, but with some individuals varying from small to very tall stature. With the women also the skin colour varies from light to dark brown. A very fair skin is particularly admired and held to be beautiful. Thus the birth of a very fair-skinned child causes real delight and it is said that it resembles the light-skinned "sky-people"⁵). The hair is always frizzy; with dark-skinned individuals it is black and with light-skinned people it varies from dark brown to reddish. Besides straight noses there also occurs the hooked Papuan nose; the cheek bones are high. It is thus obvious that we are confronted here with a strongly mixed race⁶).

1) LEAHY 473 256, LEAHY and CRAIN 474 231, 234, 236 f, 252, CHAMPION 136 248 f.
 2) LEAHY and CRAIN 474 201 f. 3) LEAHY and CRAIN 474 233 f, 253. 4) MORSCHHEUSER 581 83, LEAHY and CRAIN 474 163, 178. 5) For this see later on.
 6) CHINNERY 143 119, 121, 153 409, VICEDOM 907 13-15, TISCHNER 893 9, MORSCHHEUSER 581 94, LEAHY and CRAIN 474 173.

On the Menepo River, a tributary of the lower Wahgi River, natives with "fair golden woolly hair" were found, which colour was not caused by lime¹⁾. On the Kamamentina River also, a tributary of the Upper Menepo River, some "red-skinned snowy haired" natives were met²⁾ and on the Dunantina River, a tributary of the Kamamentina River, "a number of individuals with light skin... and even a few with tow-coloured hair" were found, and a "red-skinned baby" was seen here too³⁾. In Tunawona village, on the Tua River which is identical with the Lower Wahgi, on the boundary between the Mandated Territory and Papua, light-skinned people were encountered, some of whom were "definitely yellowish"⁴⁾. If one proceeds from this wide area to the south and north, the stature seems to diminish; thus the people between the Gafuku River and the Kraetke Range are of medium size, but their skin varies from light to dark brown⁵⁾. The people of the Chimbu and the Marifutiga Rivers, two tributaries flowing into the Middle Wahgi from the north, are smaller and more sturdy than the people further east and further west; and the people of the Bina-Bina River, a tributary of the Gafuku, are of medium height, sturdier and darker skinned⁶⁾. The languages of this area have not up to the present been investigated. Trading relations exist characteristically with the region west of Mt. Hagen. Cowrie shells were brought from the Sepik but, according to VICEDOM not previous to fifty years ago, and the T-shaped battle-axes come from the Jimi River, from where also the Mt. Hagen people received them. Other relations exist with the south-west, particularly with the region about Mt. Giluwe⁷⁾, and European articles came to this region from Papua along the big trade route already mentioned⁸⁾.

In the Wahgi Valley too there is no lack of "Polynesian" reminiscences. Here have been found earthenware ocarina-like trumpets such as, characteristically, are also known in Malu and north-west of Malu which we have seen to be the westerly limit of the third culture province of the Sepik, but which are unknown elsewhere in Melanesia. TISCHNER has pointed out that similar instruments are also known in New Zealand⁹⁾. He has furthermore drawn attention to the fact that the decoration and the shape of the spears has parallels in Fate in the New Hebrides, Fiji, as well as in Samoa and Niue; and finally, he points out that the net skirt of the men is called "mal", "a name which strikingly resembles the Polynesian "malo" "¹⁰⁾. This latter similarity may of course be pure coincidence, but in view of the many other "Polynesian" reminiscences in this culture, this point should not be passed over lightly.

In the Wahgi Valley park-like dancing grounds called "mokabena" similar

1) LEAHY in 712 (1930/31) 13. 2) LEAHY 473 232. 3) LEAHY 473 231, LEAHY and CRAIN 474 65 f. 4) LEAHY and CRAIN 474 94. 5) CHINNERY 143 116, 153 409. 6) CHINNERY 143 119, 121, LEAHY and CRAIN 474 165, BERNATZIK 70 103. 7) This is Mt. Keliwere on the map of LEAHY and CRAIN 474. 8) VICEDOM 907 12 f, 19, 28, TISCHNER 893 54, LEAHY and CRAIN 474 278. 9) TISCHNER 893 49 f, CHINNERY 143 119. 10) TISCHNER 893 16, 30 f, Note 1.

to those of the Sepik, Mt. Hagen, etc. were discovered. Here too, they are laid out in the form of a rectangle about 150 yards long by 30 yards wide; they are covered with a lawn of fine grass planted especially. The dancing grounds are surrounded first by a row of flowers, then generally by a row of cordylines, and then a row of casuarinas; next, there is a path, followed again by a row of cordylines. On one end of the lawn there is the ceremonial house. The earth removed in levelling the ground where the house was built, was carefully banked in rounded earth walls on either side, and these earth walls again were planted with various flowers and ornamental shrubs. In front of the men's house, along a line in the middle of the lawn, there are two to four round earth mounds about 3 feet 4 inches high, fenced in with bark and tree trunks, in a straight row at regular distances. These mounds are called "boglom", and ornamental shrubs or certain trees were planted on them. It is clearly evident that they agree completely with the "Zierhügel" of the other regions. Three broad paths approaching this park from different directions were bordered for a considerable distance with flowers, plants with brightly coloured foliage and ornamental shrubs. On these grounds councils were held, feasts celebrated, and visitors received. In the centre of the lawn was a long row of wooden stakes, to which the pigs were tied to be killed during the feasts. During one of these feasts "one man after another would dance along the row of pigs ... then a dozen others would strut before the onlookers with huge net bags full of shells ... displaying the wealth of the village". All the sources of information known to me record the existence of these park-like dancing grounds at the following places and with the following tribes: the Benembi people inhabiting the sources of the Wahgi River, the Jamga people who live somewhat further to the north likewise on the headwaters of the Wahgi, the whole western part of the Wahgi Valley, Daua village on the Middle Wahgi, the Korin River, a tributary of the Wahgi, the Chimbu and the Marifutiga Rivers, also tributaries of the Wahgi, the Gafuku River, and the Bina-Bina River; and on all the headwaters of the Purari thousands of casuarina trees planted by the natives were found. It is certain, however, that only future investigation will definitely show how far these park-like dancing grounds have spread, and where the limit of this highly characteristic feature in New Guinea actually is ¹).

If further proof were needed that this area had actually been influenced by the same stone-using immigrants as were the areas of the Sepik, the Abelam, Arapesh, etc. it is furnished by the fact that monoliths have also been found in this region. In the Upper Wahgi District, MURPHY discovered "a large white pillar of limestone standing upright. It measured eleven feet high, was two feet square in cross-section, and was accurately cut. What its purpose is and who put it there ... the natives have no opinion to offer" ²).

1) LEAHY 473 242 f, 247, 259, LEAHY and CRAIN 474 157, 170, 172, 179 f, 188-190, 246, VICEDOM 907 39 fig. 9, TISCHNER 893 12. 2) MURPHY 594 38.

On the Middle Wahgi „an isolated stone menhir” was found “about the origin of which the present natives have no knowledge”¹⁾. When LEAHY came to one of the park-like dancing grounds of the Korin River, a tributary of the Wahgi, he “approached it over a wide track that appeared to be much used. The track was neatly bordered on both sides with chunks of white limestone, and ornamental shrubs and flowers had been planted along it at intervals”²⁾. This description shows even more clearly the complete identity with the wide avenues of the other parts of Melanesia which were bordered not only by sacred plants but also by monoliths and other stones.

With regard to the western part of the Wahgi District, VICEDOM records the existence of “Ahnensteine”, which were used in the ancestor-feasts “Korokonda”. This feast, according to VICEDOM, was introduced only 30 years ago from the south-western neighbours two travelling days distant. According to a myth, a certain man was given cordyline leaves by the Korokonda woman which he planted near the men’s house. In the following night the stones (Ahnensteine) were brought to this spot in some mysterious way: “On both banks of the river, stones painted with colours were erected. Red cordyline leaves lay there in rows.” Only rich people are in possession of ancestor stones. They consider them as a gift of the spirits, who indicate sometimes in a dream the stones which the next morning the people can find in their gardens. “Not only the tribal ancestors but also the individual ancestors and even living men have such stones”. There are male and female stones. “The male stones, according to the importance of the man to whom they belong, are as much as 2 feet high, whereas those of boys are from 2 inches upwards. They are all worked in conical shape (I cannot imagine that they are natural stones) ground and polished. The female stones all have the shape of balls ... Those of little girls are almost the size of a fist, whereas those of female ancestors are larger than a skittle ball ... The male stones were erected in the houses along the wall, whereas the female stones lay on the ground in front of the male stones. All the stones are arranged around two worked and decorated stones worked on top like a shallow dish. These are the two female spirits Gorowob and Goronganaip. The stone of Gorowob has two small stones lying in its plate, the Goronganaip stone has only one. These small stones are the children of these spirits. All the other big spirits also have their stone ... The main point is, however, the presence of the ancestor stones and the stones of the living chiefs ... After a feast the stones are buried near a tree from where they are unearthed before the feast ... after which they are erected in the house set apart for this purpose”³⁾.

This account of VICEDOM’s is not very clear, so that it is somewhat difficult to determine with certainty whether we are confronted here with

1) LEAHY 472 186. 2) LEAHY and CRAIN 474 170. 3) VICEDOM 907 12, 24, 41, 205-210, 212.

megalithic stone-work. Some of the details seem to be against this supposition, as is immediately evident from the description. But on the other hand, the association of these stones with the cordyline, the fact that the stones were erected in a probably upright position, the occurrence of the "stone-child" lying in the depression on the top of the stones, the fact that the stones represent ancestors and that they are particularly in the possession of rich men and chiefs, certainly suggest that we have actually before us megalithic stone-work. Deeper investigation into the social life will certainly lead to a better understanding of the character of these stones.

On the Marifutiga River, LEAHY found a remarkable piece of earthwork of which he gives the following description ¹⁾: "In one neat village built on a limestone ridge, we found some rather remarkable provisions for defence and escape in time of war. On both sides of the village, the ridge was quite narrow and deep ditches had been dug across the narrowest portions, spanned by light ladders which could be withdrawn in times of danger... In the centre of the largest house, a shaft had been sunk some twenty feet straight down, with a lateral shaft leading from the bottom level to the side of the ridge, a convenient scuttle hole for escape if the village should be taken. The opening of the steep hillside was cleverly concealed by brush."

The highly developed type of agriculture with "draining" ditches has been encountered in the following regions: Wahgi District, Korin River, Chimbu River, Bina-Bina River, Dunantina River, Gafuku River, in the direction of the Kraetke Range, and on numerous other headwaters and tributaries of the Upper Purari River ²⁾.

Sacred Plants: The following data can be added to the examples already mentioned revealing the important part played here by sacred plants. In the Wahgi District, women wailing over the dead wear leaves of cordyline (*bogla kaja*) reaching from the bosom to the knees; a man's house is decorated for its consecration with ornamental plants. The "Mahnmäher" which frequently occur in the Wahgi District, show a certain resemblance to the ceremonial mounds ("Zierhügel") of the dancing grounds; these are round flower beds surrounded by a fence; around these beds a path is left free which itself is surrounded by a flower bed in the shape of a horse shoe; the whole is surrounded by cordylines; a little path leads to the opening left in this lay-out erected as a reminder of a wrong suffered which had not been revenged. This lay-out is large or small according to the gravity of the wrong; in some cases it is one metre square, in others ten metres square. But not all these floral schemes are such tokens of warning; some were erected by boys after capturing a snake ³⁾. In the region between the Gafuku River and the Kraetke Mountains, *casuarina*

1) LEAHY and CRAIN 474 166. 2) CHINNERY 143 119, 153 409, LEAHY 473 230 f, LEAHY and CRAIN 474 58 f, 168, 172, 176, 179, TISCHNER 893 52, VICEDOM 907 13, 25 f, MORSCHIEUSER 581 82, BERNATZIK 70 97, 104. 3) VICEDOM 907 17, 39 f, 195, fig. 10.

(nari) and dracaena (moia) are planted "here and there through the villages", and the people decorate themselves with leaves and flowers¹).

Prehistoric objects. At a place called Kambiliga, on the south bank of the Middle Wahgi, a man brought MURPHY a fragment of a mortar which he had found in one of the creeks. It had a handle attached and was evidently an oval-shaped vessel. The friction marks of, doubtlessly, a pestle could be seen. The rim was carved and resembled thick rope. At Gilgager, between the God Nor and Gimeri Nor—tributaries of the Wahgi—a native brought a well preserved pestle²).

Mythological evidence. It has been seen that light skin was held to be beautiful, and that the natives said of a light-skinned child that it resembled the light-skinned sky-people. VICEDOM gives the following highly important account of these sky-people: "The natives here descend from the taewamb, i.e. the sky-people. The two sky-men, Towa and Luga, came to earth with their wives and by begetting sons they founded the various tribes... To-day... the white men, are considered by the natives as sky-people. This conception is due to the fact that the natives imagine the sky and the stars to be inhabited by light people. Therefore, one is often quite seriously asked what it is like in the sky... The origin of the garden plants is attributed to the taewamb sky-people"³). From this it is clearly evident that the taewamb bear all the characteristic features which we have found to be associated with the stone-using immigrants: they came from the sky, they are light-skinned, they are the originators of the population and they introduced food plants.

Fair-skinned sky-men and one fair-skinned and fair-haired woman are mentioned also in some of the myths. One of these sky-men, called Nuguna, "was a very old and tall man"; another, called Debona Nikenz, created all the customs in the sky. This man must have been in possession of the bow, since a bamboo knife which, according to one story, a woman saw floating on the water, was in reality the string of Debona Nikenz' bow⁴).

Debona Nikenz has a son by this woman (apparently a woman of the earth; the woman drinks his urin and conceives by this). This boy "teethed and grew very quickly"⁵), an incident which is evidently reminiscent of Qat and some of the other analogous heroes, who grew up almost as soon as they were born.

It is much to be hoped that future investigations will furnish more complete accounts regarding the mythology.

The "Grasslanders" and some neighbouring regions: We now continue

1) CHINNERY 143 117, 153 409. 2) MURPHY 594 37 f; regarding stone club heads unearthed in the Wahgi District, the origin and meaning of which were entirely unknown to the natives and to which they attributed magical power, see VICEDOM 507 12, 195, TISCHNER 893 57-59, fig. 54-58; the question to which culture these finds belong will not be discussed here. 3) VICEDOM 507 25, 38, 43. 4) Bows and arrows besides spears are now used in this region. 5) VICEDOM 507 196-200.

our investigation in Papua, proceeding in a south-westerly direction along the route followed by CHAMPION, i.e. through a region which is very densely populated ¹). In a village between Mt. Giluwe and Mt. Ialibu (the Mt. Yalbu of LEAHY) a number of women of medium height with light copper skin were seen. "One woman was very fat—the fattest mountain woman I have seen", says CHAMPION ²). Although our knowledge of the racial characteristics in this region is still too scanty to draw any definite conclusion from such an isolated statement, this corpulence, in view of the characteristics of the culture suggests the so-called "Polynesian" influence. The people of the rivers Augu, Wage, and Wela, agree in their general culture and language with one another, so that WILLIAMS has included them all in the common name "Grasslanders" ³). Racially, they are apparently a mixed people; for "in colour they are mostly dark, though with a good sprinkling of fairer skins, while some are very light" ⁴). Very dark elements are to be found in the Wage area and south-east of it in the Wen Plateau ⁵). The great trade route leading to the south coast of Papua has left its mark on the people of the Mabagai River, for instance, who were found to possess a great number of steel implements ⁶).

In the village between Mt. Giluwe and Mt. Ialibu previously mentioned, there was a dancing ground 300 yards long and 30 yards wide. "In the centre was a built-up place of circular earth, in the middle of which was a graceful casuarina tree" ⁷). On the Mabagai River ⁸), "impressive sing-sing grounds" were found. "This was a level expanse of firm ground raised some distance above the surrounding marsh, and shaded by well grown casuarina trees. We thought when approaching it that we were coming to a large village" ⁹). This latter remark is probably an allusion to the avenue-like roads which lead to the dancing grounds.

These dancing grounds have also been encountered in the area of the Grasslanders; here they are called "homaa". They vary in shape, some being more or less circular about 20 or 30 yards in diameter, others roughly oblong. They are surrounded by casuarina trees and rows of dracaena (ogop). There is usually at least one house facing the dancing ground ¹⁰). To give an idea how numerous these dancing grounds are here, I shall briefly quote from the diary of CHAMPION who crossed the area of the Grasslanders and even beyond it as far as the boundary of Papua, by wandering from the south-west to the north-east. I also add the accounts given by WILLIAMS and HIDES. "October 30... The guide... led us up on a broad track... and an elderly man took us to a house in a circular plot of green grass surrounded

1) CHAMPION 136 246, LEAHY 473 252. 2) In 712 (1938/39) 20. 3) WILLIAMS in 712 (1938/29) 41. 4) WILLIAMS in 712 (1938/39) 47. 5) HIDES 358 112, 124, 129. 6) LEAHY and CRAIN 474 240. 7) CHAMPION in 712 (1938/39) 20. 8) For this river see the map of LEAHY and CRAIN; on this map the river apparently has its source on Mt. Giluwe; CHAMPION's map shows a river flowing in a similar direction and flowing into the Mendi River, but it bears no name. 9) LEAHY and CRAIN 474 240. 10) WILLIAMS in 712 (1938/39) 42 f.

by casuarina trees... At last we reached the flat... the men led us down a broad track to a little grass park surrounded by casuarina trees. (Camp 43) October 31... We set off... travelling down towards the river. The tracks were broad and clean and we passed many hamlets, each surrounded by a park of casuarina trees. We cross the... Waga... We went on to the north-east on a broad track through short grass... We passed through a wide avenue of casuarina trees to a grass lawn, where we were bidden to camp... November 4... We went along a broad track to the north-east, passing through many casuarina parks... down a shallow river... the Nembia (or Wela). We crossed it. Still following the broad track, we reach another park where ninety men were sitting in a line. Before them were bananas, sugar-cane, and potatoes which they signified belonged to us... We crossed the stream in the valley called the Enabu... November 5... We arrived at another little park to find men waiting with a present... November 6. We followed our guides... to cross a creek flowing north into the Kawuku... We... came to a park where men sat in a line with presents... They led us towards the river... across the river... Along the banks were graceful casuarina trees. (Camp 48) November 7... We descended into the little valley... and we counted twenty-five houses among casuarina trees... We came to a beautiful casuarina park with thick green grass, and here we camped... November 9... Mendi. Crossing the small stream... we passed... to the north-east... Another stream was crossed which is known as Wabu... A broad track, cut out of the hillside and with wooden steps, brought us to the park... (Camp 51) November 11... We reached a casuarina grove... The villages were called Romia... Travelling east through grass country we passed many little parks... They showed us a large track leading in that direction... The track was broad... (Camp 52; 9270 feet)"¹). This latter camp is situated north-west of Mt. Giluwe. In this area park-like dancing grounds were found at the following places: Augu River, Evera village, Kuvivi village, Ibamia Divide, Akura River, Wabi village, Kuare village, Pauoni village (where the natives had levelled off the side of a hillock to make the dancing ground), Injigale (south-east of the Waga), etc. etc. On one of the parks of the Wage River, a native explained to HIDES "with the help of his dagger of human bone, that the place was also used for cannibalistic feasts". A large park of the Wen River (south-east of the Injigale) had its lawn bordered "with white limestone". Casuarina trees were also planted around the parks of Avil village north-east of Lake Kutubu, which also probably belongs to this area of the "Grasslanders". Finally, these park-like dancing grounds with casuarinas and broad avenues are encountered on the Erave River, into which flow some of the rivers of the Grassland region²). Racially, however, the people of the Erave River resemble closely the Papuan type and have dark skin and short hair³).

1) CHAMPION 136 243-247. 2) CHAMPION in 712 (1939/40) 31-36, HIDES 358 114, 123 f, 155, WILLIAMS in 712 (1938/39) 19, 39, 42, 44. 3) HIDES 358 154, 167, 171.

With regard to the shifting of earth, WILLIAMS records ¹⁾: "One of the most outstanding features of Grassland culture... is the habit of shifting earth... The best examples of this high finish I saw at Ibi and Pami in the shape of the cut-out mortuary mounds. A sloping bank is so excavated as to leave a truncated cone perhaps 5 feet high and 6 feet in diameter. It is planted with dracaenas, which hide in their midst a little red-painted enclosure for storing the skulls of the departed". It has been seen that this shifting of earth is much more general, however, and is actually a common characteristic of all the peoples we have previously described and who have been so profoundly influenced by the stone-using immigrants. We have encountered it in precisely the same manner on Mt. Hagen, Vega village, Marifutiga River, etc. etc.

"Draining ditches" have been recorded also from the whole area of the Grasslanders, the Wen Plateau, and the Erave River ²⁾.

Sacred Plants. In the region of the Grasslanders, dracaenas (ogop) are planted around the mortuary exposure platforms, and also in the gardens as boundaries. Dracaenas are also worn by the men in their belts, and are fastened to the stakes of garden fences ³⁾.

Lake Kutubu: WILLIAMS who has studied the people of Lake Kutubu, south-west of the Grasslanders, gives the following description of them: "Generally speaking it appears that the Kutubu people belong to the Kulturkreis of the Delta: their affinities are rather with the coast dwellers than with the inlanders, though... they will no doubt be found to have much in common with the latter also when these have been studied... They generally lack... the "Jewish" noses and dark skin colour, but I would not hesitate to put them in that class on the whole. At the same time, they show a considerable range of variety in skin colour and facial features, and it seems likely that racially they are a mixed lot. There would appear to be few marriages with the Grasslanders... With the Kaibu and Fasu people in the south ... intermarriage is frequent ... Apart from these foreign elements the main population of the lake would itself appear to consist of immigrants from the Mubi a few miles to the east" ⁴⁾. The Mubi people are actually "somewhat lighter-skinned than the coastal Delta Division natives" ⁵⁾. In trade the Kutubu have an intermediary position between the south and the north, trading with the Kaibu and Fasu on the one hand, and the Grasslanders on the other, and they have furthermore trading relations with the Mubi and Fimaga. Trading relations with the Mubi River people are of particular importance, since the latter represent the principal source of shells so much valued by the Kutubu people ⁶⁾. This shows that

1) In 712 (1938/39) 44 f. 2) WILLIAMS in 712 (1938/39) 42, 44 f, CHAMPION in 712 (1939/40) 29, 36, HIDES 358 111 f, 123, 158, 174. 3) WILLIAMS in 712 (1938/39) 42, 44, 47, 49, 53. 4) WILLIAMS 954 135, see also 131 f, 142, 149, 152. 5) CHANCE in 712 (1926/27) 36. 6) WILLIAMS 954 130-135, 139, 144, 155, 292 f, 391, CHAMPION 136 206.

in race, general culture and trade, the Kutubu are the link between the Grasslanders and the Papua District in the south.

It tallies with the culture of Lake Kutubu that park-like dancing grounds are not found here, as far as I know, and it is equally significant that the highly developed type of agriculture with its chessboard-like beds is non-existent here; "gardening is surprisingly ill-developed, even on the rich land of the Mubi... in contrast to the Grasslanders" ¹).

The Mubi River people who have closer contact with the Grasslanders than have the Kutubu people, have adopted from the Grasslanders the custom of digging "defensive" ditches ²).

Sacred Plants. In the Kutubu magic for curing sickness the operator fixes a cordyline branch in his armband, and the house of the sick is struck with branches of cordyline. The particles of wood or little stones sucked out in exorcism and which represent the spirits of slain held to be responsible for diseases, are covered carefully with cordyline. This method of curing came from the Mubi River. A cordyline (ko) is also worn in the belt by the men. Another variety of the cordyline is called konjuguri ³).

Prehistoric objects. Four stone mortars have been found in the neighbourhood of Kutubu, viz. at Yogobu, Tugiri, Kesiki, and Fimaga. The pestles used were merely elongated pebbles. One of the mortars was a very good specimen, with a regular series of knobs round its periphery; the second is a plain one. The specimen seen at Kesiki is broken, having a sort of a waist in the middle. This one was alleged to have been "made" by a man named Gofu, an immigrant from Kafa, south-east of Lake Kutubu, who settled first at a site formerly occupied by the Kesiki people, and later, on Lake Kutubu. When he died the mortar was for some forgotten reason hidden by a man, and only in comparatively recent years was it rediscovered. "Gofu, the original "Maker" turns out to be the great-great-grandfather of a man now living at Kafa. If this story is to be believed", says WILLIAMS, this mortar "can be traced back for perhaps 125 years, which,... may not signify much". But in view of the fact that on the Sambrigi River, south-east of Lake Kutubu, the presence of the stone-using immigrants will again appear quite clearly, and since a stone mortar was found there also, the local origin of the mortar indicated in the Kutubu tradition is, in my opinion, probably exact; and it will be seen that even the recorded date of its introduction is likely to be correct. The Fimaga mortar is a small specimen. It is surmised that it was originally the property of a "kuruka" (supernatural being) who used it as a drum. No one thinks of making mortars on the lake in these days ⁴).

Mythological evidence. The "kuruka" are supernatural beings who in their natural element, take the form of human beings. They may inhabit the rivers as well as the lake, but they do nothing but harm to

1) WILLIAMS 954 153 f. 2) WILLIAMS 954 132, 150. 3) WILLIAMS 954 131, 136, 379 Note 21, 396 f, 399 f. 4) WILLIAMS 954 148 f, fig. 5.

real humans¹⁾). In their connection with rivers and the lake these beings certainly agree with the "wagan" of the Middle Sepik and the "wale" of the Abelam. We know too little about them however, to determine with certainty to what culture they belong. But it is worth mentioning that one of these "kuraka" is described as a man with fair skin²⁾ and that another used a stone mortar as a drum, as we have seen.

The belief moreover exists "not held by, or even known to everybody at Kutubu, that each living person has a sort of spiritual counterpart in the sky, whose life runs somewhat parallel with his"³⁾, but we have insufficient knowledge regarding this conception, and I quote this information for what it is worth.

Tarifuroro: North-west of Lake Kutubu, the Tarifuroro of the Ryan River were found to be of short stature and light-skinned, two characteristics which are often ascribed to the "mountaineers". But HIDES in describing them says: "I was greatly interested in their Asiatic-like features; their cheek bones were high, and their noses and lips were all finely moulded... They are naturally long-haired people"⁴⁾.

The very highly developed type of agriculture with its square plots and hedges of croton and hibiscus, was encountered here again. The houses also were surrounded by hedges of croton and hibiscus⁵⁾.

Unfortunately there is no other record regarding this tribe.

Tugi: In the area east of Lake Kutubu, traces of the stone-using immigrants appear more clearly again.

The Tugi people have trading relations with a tribe to the north-north-east. It takes eight days to reach them. "We go to these people... three days from our village... they have to travel five days to meet us", said the natives⁶⁾.

In the Tugi region, FLINT "passed a stone in the scrub. It was bell shaped, green with age, and covered with moss. It would weigh about 40 lbs. The legend connected with it is that one day, long ago, it fell from the sky, as a precursor of the coming of a legendary chief called Ro, who journeyed across the Murray Range, and created the Ro people. It is kept free of growth by the Okani people⁷⁾. It is known in the district as Aparanigi"⁸⁾. One would of course like to know more about this stone, but it is highly significant that the stone, as well as the man who followed its coming, came from the sky, and this association with the stone gives further strength to our view that the light-skinned sky-people of the Wahgi District were

1) WILLIAMS 954 280. 2) See WILLIAMS 954 128 f. 3) WILLIAMS 954 280.
4) HIDES 358 73, 81, 90, 93, 95, 124; people of this kind were met by CHAMPION on the Kuru River, where they came for trading purposes. CHAMPION 136 200.
5) HIDES 358 78 f, 84, 88, 92, 154. 6) FLINT in 712 (1921/22) 146, MURRAY 596 195 f.
7) These people actually form part of the Sambrigi people. FLINT in 712 (1921/22) 149, 712 (1922/23) 18. 8) FLINT in 712 (1921/22) 146.

actually stone-using immigrants. At present the Ro people inhabit the Sirebi River, a tributary of the Kikori¹). The myth thus shows that a migration of the stone-using immigrants proceeded via Mt. Murray and then in a south-easterly direction. From the following data it will be clear that such a migration of the stone-using immigrants is actually very probable, since the material remains of the stone-using immigrants, as well as the racial characteristics in this region, are in its favour.

"In front of the Tugi dancing houses, long shallow trenches were seen. The bottoms were paved with small stones, which were seen in all villages. The people volunteered the information that these trenches were used for cooking the bodies of their enemies"²). This is reminiscent of the Wage River (Grasslanders), where the people apparently wished to make it clear that cannibalistic feasts were held on the dancing ground. It must, however, be borne in mind that the recorders of both these accounts had only a very rudimentary knowledge of the native language.

Sambrigi Valley: In the Sambrigi Valley which adjoins the Tugi region in the east, the people are sturdy limbed, rather small, in many cases dark brown and with arched noses. "But on the other hand, there were almost as many light-skinned people as dark", with woolly hair. Several writers have emphasized their "magnificent" physique³). Little is known regarding their trading relations. A few Sambrigi men were met in one of the Ro villages on the Upper Sirebi River, and it is in fact the Sambrigi tribe which is responsible for the decimation of the Ro people, who were at one time much more numerous⁴). Iron axes and bits of brass found with them indicate that they have trading relations with the coast, and they also knew the names of the Kiko River, Turama, and the Bamu. Shells are brought to them by the Bara people⁵), who inhabit the region between the Tugi and Sambrigi on the one side and the Ro on the other. These Bara people are of small stature and light-skinned⁶). We do not know how long these trading relations have existed, but they would correspond strongly to a culture migration from the Tugi to Ro.

In one of the villages of the Sambrigi valley, the natives said to FLINT, who was resting on a heap of stones about 30 yards from the men's house: "Do not sit there. That is the place where we cut up the men we kill before we cook them, and their blood runs into the ground"⁷).

In a rock shelter were seen two skulls and bones placed side by side in a circle of stones. Close by there was evidence of a grave having been opened and bodies exhumed⁸). Since, however, such stone circles are not recorded

1) FLINT in 712 (1921/22) 148. 2) FLINT in 712 (1921/22) 151. 3) BEAVER 55 261, HIDES 358 XI, SMITH 785 325; 712 (1921/22) 150, 712 (1922/23) 18. 4) FLINT in 712 (1921/22) 148 f. 5) BEAVER 55 264, SMITH 785 325, FLINT in 712 (1921/22) 150. 6) FLINT in 712 (1921/22) 142. 7) FLINT in 712 (1921/22) 144, MURRAY 596 194. 8) SMITH 785 326.

from anywhere in this region, only future investigations can give a definite answer to the question, whether or not this was simply an accidental arrangement of stones.

The cultural connection of this area with the Mt. Hagen, Wahgi River, the Grasslanders areas, etc. is again clearly evident from the occurrence in the Sambrigi Valley of the very highly developed type of agriculture with its system of "drainage" dykes. Here these dykes are in some cases as much as 8 feet deep ¹).

Sacred Plants. Hardly anything is recorded regarding these plants; we are simply told that all villages were surrounded by crotons ²).

Prehistoric objects. In the Sambrigi Valley a stone mortar was found ³).

Before continuing our investigation on the coast, we must first study the other inland tribes, a knowledge of which is necessary for an understanding of the cultural connections in this area. To this end we shall resume our investigation of the Upper Sepik at the point where it was interrupted.

Upper Sepik: On the tributaries of the Upper Sepik, the North River, Green River, and October River, as well as on the Upper Sepik itself, very light-skinned people were discovered, whose skin was no darker than that of Micronesians. THURNWALD has expressed the opinion that they are more lively and more interested, which may, however, in some measure have been due to the fact that they had probably never before seen any other European. It seemed, moreover, that the social standing of the women was better than in the other regions. For these reasons THURNWALD is inclined to think that the influence of a foreign race had probably been at work here ⁴). From the Yellow River upwards the culture seems to be richer in comparison with those of the lower part of the Upper Sepik ⁵); but our knowledge of this region is still too scarce to permit us to express any definite opinion ⁶).

The "Mountain People": Under "Mountain People", KIENZLE and CAMPBELL have included the numerous tribes living between the Thurnwald Range and the Kaban Range, i.e. people who "are certainly springing from a common origin" ⁷). Many of these Mountain people are short in sta-

1) SMITH 785 325, BEAVER 55 262, FLINT in 712 (1921/22) 149, Oldham in 712 (1922/23) 18, CHUNNERY 151 281. 2) FLINT in 712 (1921/22) 150. 3) FLINT in 712 (1921/22) 144, and Plate at the end of the volume, MURRAY 596 194. 4) THURNWALD 875 92, 876 346 f, 879 74. 5) THURNWALD 876 347. 6) In the region of the Hoffnungs River, the people were tall and broad shouldered, KARIUS in 712 (1927/28) 105; but at the headwaters of the Sepik near the „Riese" and the „Kahlköpfe" short people were met. THURNWALD 875 88, 879 74. 7) KIENZLE and CAMPBELL 430 466.

ture, and dark-skinned, but others are tall, and a light copper colour is not uncommon among many of them; their hair is crisp and curly. The Aptalmin and Feramin inhabiting the area south of the Sepik are very light-skinned, and among the Kelefomin who inhabit a region between the Aptalmin and Feramin, many tall individuals are observed, some 6 feet and over ¹). Somewhat more to the south, actually in Papua, live the Bolivip, who inhabit the region of the Bol River, a tributary of the Upper Fly. They are of medium size, and there are numbers of dark-skinned people among them, though there are also individuals of remarkably light skin, and the children especially, are very light-skinned. Their hair is woolly ²). The occurrence, side by side in the same region, of medium-sized, tall, dark-skinned, and light-skinned people certainly favours the opinion that we are really confronted here with a mingling of races, and that the environmental factor is insufficient to explain the occurrence of light skin.

Somewhat further to the east, in the boundary region between the Mandated Territory and Papua, very light-skinned people were observed at the source of the Luap River, a north-western branch of the Upper Palmer River. A considerable population was found to be living around Mt. Blücher, Mt. Sare, and not far away at Mt. Donaldson ³). Trading relations of the Mountain people do not extend very far, existing mostly between neighbouring tribes and with the Bolivip. With the people south of the Kaban Range there is some contact along two trade routes, one of which passes near Mt. Blücher, and the other near the headwaters of the Tedi River ⁴).

In the whole area of the Mountain people, as well as with the Bolivip, the men's houses are separated from the remainder of the village by a fence along which crotons or some other ornamental shrub is planted; it seems also that the villages were surrounded with crotons and other gaily coloured shrubs ⁵). This is certainly very slender evidence on which to assume the presence of the stone-using immigrants in this region. It must not be overlooked, however, that our present knowledge of this region is inadequate and that observations made so far have not penetrated deeply into the culture. But bearing in mind the racial characteristics and particularly the fact already mentioned, that in certain parts of the island, Austronesian immigrants must have crossed the whole of New Guinea, I am inclined to

1) KIENZLE and CAMPBELL 430 470, 476, Pl. I, CAMPBELL 120 246, KARIUS in 712 (1927/28) 28, 99, 101, CHAMPION 137 208. The suffix "min" means "tribe", 712 (1926/27) 110. The frequent occurrence of this suffix in the names of many tribes of this region shows their cultural connection; a connection which is also evident from their material culture. See: KARIUS in 712 (1927/28) 101. 2) CHAMPION in 712 (-926/27) 108, KARIUS in 712 (1927/28) 96, 99. 3) CHAMPION 137 50, in 712 (1926/27) 105, 107, HADDON 329 83, THOMSON 868 152, MURRAY 595 284 f, KARIUS in 712 (1927/28) 100 f. 4) KARIUS in 712 (1927/28) 99-101, KIENZLE and CAMPBELL 430 466 f, 469 f, 479, CAMPBELL 120 245 f, 248 f, 252, CHAMPION 137 196, 202 f. 5) KARIUS 425 314 f, in 712 (1927/28) 100, KIENZLE and CAMPBELL 430 473, CAMPBELL 120 249, CHAMPION 137 93, 205, 206, THURNWALD 875 87.

believe that the use of croton in this area suggests the presence, or some cultural influence of the stone-using immigrants. But only future investigation on the spot can clear up this point.

Ok Tedi: Farther to the south-east, on the Ok Birim, a tributary of the Ok Tedi or Alice River, and also on the point where the Ok Birim flows into the Tedi River, the people are much shorter than those of the Tedi itself. On the Tedi River farther to the north of this point, the people are medium sized and even tall. On the Lower Tedi, the skin is often light, and further north, on the Upper Tedi and in the Star Mountains, the skin is still lighter, so light that some of the people "might easily have passed for a white man somewhat bronzed by the sun". The hair is woolly and short ¹). The Awin are numerically the biggest tribe found east of the Ok Tedi and extend almost as far as the Strickland River, and up into the foothills of the Kaban Range ²). Their language is relatively uniform ³). In this area the word for water and river is "wai", and it appears, for instance, in the river names Wai Duwo (Palmer River), Wai-miu (Tully River), Wai mur, Wai Mongi, etc. etc. Among the tribes of the west "Ok" is the general name for "river" ⁴). RAY, discussing the word "wai", says ⁵): "With regard to the word "Wai" for water, in the Awin language... the appearance of such a characteristic Melanesian word so far away from any apparent Melanesian influence is certainly remarkable. I think, however, that it must be regarded as an accidental coincidence. The word "Wa" for water is found at Panim, a village at the back of Friedrichshafen in the Mandated Territory (in the same dialect "Dyai", fire, resembles the Awin "De", "Di"). But Panim and Awin seem too far apart for any connection to have occurred". But AUSTEN says that the Awin language "has not been traced as being connected with any other languages known to be spoken in Papua", and he expresses the opinion that "the Awin language has probably travelled over from the country south of the Middle Sepik" ⁶). AUSTEN does not give detailed reasons for his opinion, but it is of interest that it is precisely this region of the Middle Sepik, where we have seen such clear evidence of the presence of the stone-using immigrants, i.e. of an Austronesian culture. The problem of the relation of the stone-using immigrants to those who, according to HADDON, brought the kava and the conception of the devouring monster from Astrolabe Bay to the south coast of New Guinea, will be discussed later on.

No stone-work has been recorded from this region up to the present, but on the Teddy River a most extraordinary kind of earthwork was found. Latrines were dug and consisted of a hole in the ground about 3 feet in

1) AUSTEN 32 341, 347 f, in 712 (1921/22) 41, 135; 712 (1922/23) 31, 33, D'ALBERTIS 15 II 123, CHAMFION 137 208, HADDON 329 81. 2) KIENZLE and CAMPRELL 430 466.

3) AUSTEN in 712 (1924/25) 75, CHAMFION in 712 (1926/27) 114 f. 4) 712 (1924/25) 16.

5) In 712 (1924/25) 16 6) In 712 (1924/25) 10.

diameter and 30 feet deep! The earth was piled at the side of it and used for covering over the excrements ¹⁾. "Draining" ditches similar to those of the Mt. Hagen-Wahgi area and the other regions, whose connection with the Middle Sepik we have already learned, have been recorded on the Lower Fly and even in Dutch New Guinea west of it. Consequently, it is not probable to my mind that this kind of earth-work on the Tedi River could be due to a culture other than that which, in the above mentioned regions, is responsible for the various modes of earth shifting, including the draining ditches and ditches for defence and other purposes.

Sacred Plants. We are only told that on the Tedi River crotons, cordylines, coxcombs, coleus, and other decorative plants were seen growing in the gardens ²⁾. At a certain place on the Fly River, 380 miles from its estuary, drums and tobacco pipes were found, the ornaments on which HADDON has interpreted as leaves of croton and dracaena ³⁾.

Mythological evidence. There is still another reason in support of the view that this region has been influenced by the culture of the stone-using immigrants. HIDES records the following myth of the people of Iungazim village, on the Strickland River, who are of Papuan type and who wander up and down the Strickland River on their head-hunting expeditions ⁴⁾. This is the only myth which has been recorded so far from this big area. They say that there is only one god. He is the god of the Iungazim and all the coconut people. No one knows his name. There was nothing in the world when he was. He looks after the sago, the birds, pigs, cassowaries, and after the unborn children. Head-hunting exists because of him. The god killed Somoali, the god of the bushmen and the bad talk people, and took the head of Somoali. The god planted Somoali's head, and from it grew the first coconut. That is why the people take heads only from the bushmen and never the heads of the coconut people ⁵⁾. HIDES does not give more details regarding this coconut people to whom the god belongs. But the facts that, like the many other stone-using immigrants, he created the coconut by planting a skull, that he is not a bushman (as is evident from the story) that he introduced head-hunting ⁶⁾, and that he looks after the unborn children makes it almost certain that he was a stone-using immigrant. If we bear in mind how extremely little is known about this region, this myth with its clear reminiscences of the stone-using immigrants is all the more significant. When more is known of the culture of this area, we may expect the traces of the stone-using immigrants to appear with greater clearness.

Middle Fly: We know only little regarding the racial characteristics of the Middle Fly. On Lake Murray and probably on the Middle Fly generally, the skin is much lighter than on the coast. On the Strickland River the

1) AUSTEN 712 (1921/22) 128, 137, MURRAY in 712 (1921/22) 9, 596 206. 2) AUSTEN in 712 (192/22) 138. 3) 711 IV 373. 4) HIDES 358 15, 22, 28. 5) HIDES 358 34 f. 6) For the discussion of this problem see below.

semitic type is predominant¹). Intertribal trading relations on the Fly, including war-like relations, extend from about Everill Junction as far as about Weriadai on the Lower Fly. Certain ornaments found south of D'Albertis Junction seem to point to relations with Lake Murray. Cultural and trading relations exist particularly between the Suki near Tidal Island, and the Morehead River as well as with the Tugeri²).

Near Ellangowan Island, i.e. about 150 miles up the Fly, ruins of an old village were found. Around the dwellings, a ditch about two feet broad and equally deep had been dug, for the purpose of draining, as D'ALBERTIS, who records this, thinks³).

Kiwai and the Fly estuary: In the area of the Fly estuary, the people are of mixed race. In the Fly estuary, Attack Island, Canoe Island, and Kiwai, the people are of medium height or short, but on Kiwai Island they are generally tall. The skin varies from very dark to light, the light individuals of Canoe Island and Attack Island being lighter than on Kiwai. The nose is arched and the hair short and frizzy, but in some instances longer. Prognathism is frequent⁴). Although the cephalic index is not dealt with generally in this work since there is a scarcity of data regarding this trait, it might be mentioned that up the Fly River, well into the interior, there is a dolichocephalic population; but even high up the Fly River there are traces of brachycephalism. This is well marked in its delta, where a mixture of peoples has taken place. Mesaticephalic or low brachycephalic people have established themselves at Canoe Island, Kiwai, Oriomo, and probably at other places on the coast of Daudai, and brachycephalic people are numerous also in the Torres Islands. HADDON, discussing this problem, expresses the opinion that these brachycephals represent an autochthonous population, or, if they were actually immigrants, they would be the oldest brachycephalic immigrants⁵). Only future investigations will provide an answer to the question as to how far these brachycephals are related to the other brachycephals of Melanesia. Whereas the trading relations of the Fly estuary up the River reach as far as Weriadai, those of Kiwai Island extend to Dibiri in the east, and to Daudai, Mawatta, and Budji in the west, as well as to many of the Torres Islands. In culture also there exists a reciprocal influence between Kiwai and the Torres Islands, a fact which is borne out by the myths. It is well known that the trading of canoes is particularly intensive, the canoes being brought from Kiwai and even from Dibiri to the Torres Islands through the intermediary of Mawatta⁶). The Kiwai language has spread very far. In the west it extends

1) MURRAY 595 193, 286, 599 41, HIDES 358 15, THOMSON 868 192; 712 (1920/21) 113, 712 (1927/28) 20. 2) KIENZLE AND CAMPBELL 430 466, SHARP 779 98; 712 (1924/25) 13, 17 f, 29, (1927/28) 21, (1932/33) 17. 3) D'ALBERTIS 15 II 31 f, FRANKS 266 222. 4) D'ALBERTIS 15 II 19, 41 f, 51, 237, 377, WILLIAMS 946 43, CHAMPION 137 128, FRANKS 266 218 f, BEAVER 55 154, HADDON 329 69. 5) HADDON 325 414-416, 439 f, D'ALBERTIS 15 II 73 f. 6) LANDTMAN 457 25, 29, 31, 33, 41, 47, 69, etc. etc. D'ALBERTIS 15 II 51, 140, 190, 379, HADDON 329 69, BEAVER 55 163, CHALMERS 130 117, etc. etc.

to Mabudauan, and the languages to the east as far as the Purari River show resemblances to the Kiwai language¹). From the fact that kava is drunk in Kiwai, and that the conception of the devouring monster exists in some of the neighbouring regions, it is immediately evident that more recent influences of culture have been at work in this area. It is well known that HADDON has attributed these two elements to a migration of culture which, from Astrolabe Bay, crossed the whole of New Guinea. It is necessary at this point to discuss the question as to what culture these two elements can be attributed.

Kava drinking, as far as we know at present, is known in the following places of New Guinea: Huon Gulf: Bukaua, Jabim, Tami, Cap Cretin, Finsch Haven; MacLay Coast; Astrolabe Bay: Bongu, Constantine Haven, Bogadjim, Beliao Island, Kadda, Wuong, Bilibili, Jakob, Graged, Peisari; Dampier Island and perhaps on the Lower Sepik. In the area of the Sambrigi-Mubi Headwaters of the Kikori River the problem of the use of kava does not seem to have been solved. FLINT records of the Sambrigi Valley: "I saw two large kava plants growing in the village. The people informed me that the stem of the plant when dried is chewed"²). Apart from the fact that FLINT had only a rudimentary knowledge of the language, we would mention that BEAVER says that on the neighbouring Mubi River "some gamada plants were seen, but the natives did not know the use of this plant"³). Moreover, a kava plant was seen on the Upper Kikori in a native garden⁴). But does this mean that the kava plant was cultivated and used for drinking? Only future investigation will be able to clear up this point. On the south coast, the use of kava was found in the following regions: Gogodara, Kiwai (who learned its use from Gogodara and Daudai), Wabuda, Daumori Island (Fly Delta), and in the following regions beyond the Fly: Daudai, Daru Island (in the Torres Islands kava is unknown), in the Binaturi villages Dirimo, Masingara, and Mawatta, among the Jibu and Yende on the Binaturi headwaters, and the Somlos (north-west of Masingara). Whereas the use of kava appears only sporadically and seems to be a foreign element with the Semariji, Gambadi, Keraki, and Mikud, it is frequently used by their northern neighbours the Wiram, Aram, and Anima; furthermore it is used by the Tugeri and Marind anim, in Bibikem (east of the Muli), Komolom Island, Frederik Hendrik Island, Ilwajab south of the Digul estuary (which has trading relations with Frederik Hendrik Island and with the Marind anim⁵) and by the Sohur, who adopted it from the Marind with whom they have relations⁶). Kava plants, but not the use of the plant, are recorded from the Kai, Yodda Valley, Gira River, Koiari, and Ok Tedi.

The conception of the devouring monster is recorded in the following

1) LANDTMAN 457 1, WIRZ 969 5. 2) FLINT in 712 (1921/22) 144. 3) 55 266.
4) 712 (1911) 170, NEVERMANN 612 179 BEAVER 55 92. 5) NEVERMANN 610 119.
6) NEVERMANN 615 174 f, 177 f, 181 ff, 612 191 f.

regions: Orokaiva, Yodda Valley (perhaps), Huon Gulf: Bukaua (balum), Jabim (balum), Kai (ngosa), Kai of the Sattelberg (ngosa), Bulung (ngosa), Simbang (balum), Poum (balum), Tami (kani), Siassi (kani), Rook Island (kani), MacLay Coast (?), Astrolabe Bay: Bongu (ali), Bogadjim (asa), Siar, Stephansort (asa), Prince Adalbert Hafen (barak), Dampier Island (barak), Nor Papua (brag), Wogeo, Karesau, Bertrand Island (parak), Guilbert Island (parak), Arapesh, Jakumul (parak), Angiel (pariak), Seleu (parak), Tumleo (parak), Berlin Haven District (parak), Aitape District (parak), Arop (parak), Varopu (parak), Serra (parak), Vanimo (para), and Tanah Merah Bay. On the Sepik it has been recorded in: Kambrambo, Tonbunku, Angerman, Iatmul, and farther inland from the Mundugumor (Yuat River). On the south coast it is recorded from the Gogodara, Papua Gulf, Damara Island, Bamu (only traces of it), Goaribari Island (only traces of it), Era River, Purari Delta, Namau, Kaimari, Maipua, Iari, Elema (traces of it), Masingara, Tugeri, and Marind anim¹).

HADDON is of opinion that the immigrants who brought the use of kava and the conception of the devouring monster "descended some distance down the Ramu and crossed the main range somewhere about 5° or 6° S. lat., reached the upper waters of the Strickland, followed the course of that river, crossed the Fly and passed down the Merauke and other rivers to the coast"²). Our data contain more recent information with which HADDON could not have been acquainted at the time of the publication of his "Migrations of Cultures in British New Guinea" and from this information it is evident that the starting point of this migration as indicated by HADDON must be modified. Neither the kava nor the conception of the devouring monster have so far been recorded from the Ramu, but the devouring

1) CHINNEY 146 33, 45 f, 48 f, 75, ERDWEG 230 103, 276, MEYER 561 29, 32, 50 f, 427, 452, PARKINSON 630 570, 668, 635 33, 35, 45-47, 294 f, ZÖLLER 989 253, 269, HADDON 320 336 f, 323 238-240, 245, 253, 258, 260, 269, 273, 326 178, 327 145-151, KUNZE 447 51, 448 82, 84, 86, 97, 449 88, 91, 105, 450 65 ff, RESCHKE 713 80, 85 ff, 93, SCHMIDT 833 1032, 1036, HOGGIN 378 332, WIRZ 964 48, 965 145, 966 323-355, 969 11, 15 f, 44, 68 f, 80 ff, 970 405-415, 451, 453, 396, LYONS 505 330, SPEISER 797 168 f, WILLIAMS 945 109, 131, 142, 145, 159, 948 387, HURLEY 400 269, MOYNE 588 62, HOLMES 395 124, RECHE 707 212, 271, 349, GEHRMANN 278 6, BIRÖ 74 55, 66, AUFINGER 28 279 f, DEMPWOLFF 188 90, 100 f, PÖCH, 669 7, 667 391, 677 616, FINSCH 236 300, 302, HAGEN 333 172, 185 f, 190, 192, 199, 234-236, 238, 270 f, 276, 299, NEVERMANN 610 58-61, 75, 85, 93, 102, 125, 136, 147, 611 18-23, 29-33, 40, 51 f, 55 f, 612 179 f, 188-190, 615 179, 190, KRIEGER 441 168 f, 190, 210, 271, WERNER 391 75, 390 152, MACLAY 568 71, 321, 328, 572 350 f, 687, GUPPY 314 97, CLERQ and SCHMELTZ 159 Pl. I, 1, MEAD 539 170, 541 239, 242 ff, BATESON 48 135 f, 49 436, BAMLER 44 496, 501, ZAHN 967 296 f, SCHELLONG 811 146, 153 ff, KEYSER 427 47, 428 35-40, 100, LEHNER 486 403 ff, BRAVER 55 70, 92 f, 171, 206, 266, WILLIAMS 944 183, 946 42, 309, 427, SCHMELTZ 824 157, KIENZLE and CAMPBELL 430 472 f, LANDTMANN 457 68, 76, 84, 106-110, RILEY 720 89, D'ALBERTIS 15 II 197, CHALMERS 126 119, 127 65, 221 128 104, 108, 130 121, MURRAY 595 179, 194, THOMSON 868 123, BEVAN 72 27, AUSTEN 32 344, HALIE 337 1059-1063, 711 I 50, 238, 242, 246 f, IV 141; 712 (1895/96) 40, (1911/12) 170, (1919/20) 14, 1921/22) 42, 137 f, (1922/23) 31, 1926/27) 16.
2) HADDON 323 5 f.

monster certainly occurs on the Sepik, and the use of kava perhaps also. From this it must be concluded that the first phase of this migration was along the Sepik. Later HADDON actually inclined to the view that the migration took place along the Sepik¹). Regarding the further course of this migration HADDON says: "I consider it highly probable that there was a series of migrations down the Strickland River... The migration of the original Marind tribes doubtless came this way and also elements in the population and the culture of the extreme west of Papua. One group of immigrants settled on Lake Murray, another formed the Gogodara... and some migrants may have reached the mouth of the Gama. More to the east, the Kerewa peoples at the mouth of the Kikori, the Purari Delta peoples, and the peoples along the coast of the Gulf of Papua may be regarded as terminal points of analogous migrations from the north down the great rivers of the Delta and Gulf Division"²). On the south coast of New Guinea many elements of culture were spread via Kiwai which has itself been influenced by a culture coming from the interior. This latter fact is emphasized by WIKZ, when, regarding the culture of the Papuan Gulf³) he says: "The starting point of this culture is Kiwai, which has itself perhaps been influenced by culture movements from the north. In any case, culture contact with the Sepik region must have existed a long time ago. These Fly and Sepik cultures brought plaited masks, elements of the initiation rites, perhaps the cult of trophies, and the long sip houses, since these are encountered in an exactly similar manner on the Sepik".

Here we are particularly interested in the problem of the relation between the use of kava and the culture of the stone-using immigrants. The data quoted regarding the geographical distribution of kava in New Guinea show that kava occurs in few regions only where the influence of the stone-using immigrants is clearly evident; on the other hand, it is unknown on the north-east coast and east coast of New Guinea, on the Middle Sepik, in the interior of New Guinea, and in many other regions where the influence of the stone-using immigrants is clearly manifest. Therefore, although the use of kava and the conception of the devouring monster certainly form part of the Austronesian culture complex, they are very unlikely to belong to the megalithic culture in New Guinea. We shall revert to this problem later on. We refrain here from the further discussion of the problem of the devouring monster; its main interest lies in its distribution in New Guinea, where it indicates a Melanesian migration across the whole of New Guinea. Beyond Melanesia, it occurs in the Kakihan society of Ceram, from where, as DEACON has shown, it was brought to Melanesia by Melanesian immigrants⁴). In Melanesia the conception of the devouring monster occurs furthermore in the initiation ceremonies of Boieng

1) In his introduction to HOLMES 395 7. 2) HADDON in 711 I 379, see also 328 177, 325 273. 3) 969 5. 4) DEACON 168 335 ff.

Island ¹⁾, with the Sulka ²⁾, on Pororan Island (west of Buka) and North Bougainville ³⁾, and in the Lambumbu and Lagalag Districts of Malekula ⁴⁾. In Ulawa and Arosi in the maraufu initiation of the Araha boys into bonito fishing, whose connection with the stone-using immigrants we have shown, the boys stand upon a certain platform which represents a bonito. The ladder of the base of the platform represents the bonito's mouth, by which the boys enter ⁵⁾. But the conception of devouring is not mentioned in this regard, the outcome of the rite being the union between the boys and the bonito.

A further fact pointing to a connection between Kiwai and Astrolabe Bay is the Kiwai myth of Sido: From his swollen member food plants came forth, an incident which agrees with the myth in Bogadjim of the woman from whose swollen limbs food plants came forth and who is said to be the wife of Kelibob. This same theme occurs also on Graged Island in Astrolabe Bay, in the But District further to the west and, in the east, with the Jabim, Tami, and the Kai of the Sattelberg ⁶⁾. Although the language of Kiwai which has spread to the east, west, and up the river, is Papuan ⁷⁾, it is worthy to mention that in ZÖLLER's opinion the Kiwai language shows "remarkable reminiscences of the Astrolabe Bay language" ⁸⁾, an opinion, which is, however, peculiarly his own and is not confirmed by any other student, as far as I can see.

On Kiwai Island, and somewhat up the river from Canoe Island, a certain kind of modelling of the skulls of relatives is customary. The skulls are provided with lips, ears and noses made of beeswax and the eyes and nostrils are represented by pieces of shell ⁹⁾. A similar treatment of enemies' skulls occurs in the Papuan Gulf, on the Bamu, Turama, Omati, Goaribari Island, and Kerewa, i.e. in an area in which also many other traces of the influence of the Kiwai culture can be found. Here the skulls are painted and fitted with artificial noses and eyes ¹⁰⁾. With the Urama, between Era Bay and Paia Inlet, skulls which seems to be those of relatives, were found adorned with clay noses and artificial eyes ¹¹⁾; and modelling of the skulls of relatives occurs finally in the Purari District ¹²⁾. WIRZ is of the opinion that the modelling of skulls has come to the Papuan Gulf from Kiwai ¹³⁾. HADDON has drawn attention to the similarity of this modelling of the skull with that of the Middle Sepik, and FOX was the first who noted that cane masks of very similar type are found on the Sepik, somewhat inland from the estuary of the Fly, and also on Goaribari Island ¹⁴⁾. This probable

1) BELL 62 305 f. 2) RASCHER 688 227, PARKINSON 630 636. 3) THOMAS 861 226 ff, BLACKWOOD 75 215 f, 76 194 ff, 244. 4) DEACON 184 250 ff, 327 ff, SPEISER 79 168 f. 5) FOX 263 185 ff, 346 ff, fig. p. 348. 6) RESCHKE 713 58, GERSTNER 279 260, ZAHN 987 390-3939, BAMLER 44 557-559, KEYSER 428 222-225. 7) MACGREGOR 520 98, RUEY 724 324, RAY 700 19 etc. 8) 989 426. 9) LANDTMAN 457 259, 460 201, D'ALBERTIS 15 11 40. 10) BEAVER 55 249, WIRZ 965 32 f, 969 66, 72, 74. 11) MURRAY 595 185. 12) WIRZ 969 76, HADDON in 711 1 340. 13) 969 4. 14) HADDON 320 352, MURRAY 595 189, FOX 265 380.

relation with the culture of the Middle Sepik is of great importance, since other traces of the stone-using immigrants are also evident on Kiwai Island.

HADDON gives the following record regarding Kiwai Island: "On this island a number of very large, well-shaped, polished stone implements are found in the bush; the largest I have seen... measured $18\frac{3}{4}$ inches in length. These stones are now placed at the head and foot or all round the graves, and the natives do not appear to know anything of their former use" ¹). MURRAY also ²) records the existence of polished stones, the use of which is unknown to the present natives. He thinks that these stones were either used as axes or as money. LANDTMAN ³) declares them to be stone axes and says: "Stone axes were often kept on graves or at water holes, stuck in the ground in an upright position... The size of the blade varies enormously, the longest I saw measuring 53.5 cm, in length, the shortest, little more than 6 cm". Unfortunately, neither of these students has given a more detailed description or a picture of these "stone axes"; it is evident, however, that at least in their present function, these stones resemble in some way monoliths.

LANDTMAN ⁴) mentions a certain place where "there is said to be or to have been a stone shaped like a hawk". The importance of such information is evident, but unfortunately nothing else is recorded regarding this stone.

On Kiwai Island and in many villages of the mainland opposite, well cut ditches about three feet deep were observed in the well-kept plantations. They are declared to be draining ditches by all the writers describing them. In the Tinung Lagoon villages, drains had been cut around each house, "to carry away the water from the roof" ⁵).

Sacred Plants. The use of sacred plants is extremely frequent on Kiwai, and since we are very well informed regarding this island, the data are particularly abundant.

A few croton bushes are planted around the graves and sometimes a coconut tree at the head and foot; at the dances in which the dancers represent the spirits of the dead, they hold croton branches in their hands; at a certain ceremony held in memory of those who have died, all the baskets with food arranged for this feast are decorated with croton leaves and, if the dead person be a woman, a digging stick decorated with croton twigs is attached to them. To cause the spirit of a dead to quit the house in which the death took place, men enter the house scattering croton leaves, women strike the floor of the house with croton leaves, and croton leaves are thrown all over the floor of the house. Invitation to a dance or feast is conveyed by means of a croton branch taken to the other village. At dances, branches of croton, dracaena and other bright coloured bushes are inserted

1) HADDON 318 108. 2) 595 192. 3) 457 34 f. 4) 457 292. 5) HADDON 329 68, HENNESSY 354 65, CHALMERS 128 255, 130 119, LANDTMAN 457 66 f, ZIMMER in 712 (1927/28) 20.

in the arm ring; after the dances these branches are taken to the plantations and stuck into the ground in order to bring luck, or they are buried along the rivers or swamps that a great quantity of fish may be procured. In a certain part of the Moguru ceremony in which promiscuous intercourse is usual, scrapings of crotons and dracaena (sagida and samera) are used to cause sexual excitement. After the Moguru ceremony the natives keep a small part of the wild boar, which is the central figure in the various rites, and bury it underneath some croton or dracaena bush growing just outside a garden infested by pigs. This "shuts the way" for the pigs. After the swinging of the bull-roarers, the people put them down in the middle of each garden, where a croton bush (esame) has been planted. The bull-roarers are placed on the east side of the croton, to protect the plants against the burning of the sun. The taro gardens are called "esame-pari", apparently because some croton bushes (esame) are always planted in the gardens; in yams magic a digging stick is put into the ground and croton leaves are tied to the top of it; when the first banana tree planted puts forth new shoots, the owner holding some leaves of the hamera bush (croton or dracaena is generally planted close to the first banana tree in every garden) stretches out the shoot drawing his hand along it in order to encourage the growth of the banana tree. In order to induce fish to come into a trap, a branch of one of the bright bushes used for dancing decorations is used in a certain manner after which the branches are stuck into the ground near the mouth of the trap. Croton branches inside the petticoat of a woman is a sign that the marriage has been consummated. In the Mimia ceremony the dancers wave croton branches in their hands. The purpose of the dance is to drive away all sickness. After the dance they stick the croton twigs all over the beach. The high tide afterwards covers the branches sometimes carrying them away and by this all sickness is driven away. The croton branches which are stuck into the beach are also planted in the gardens for promoting growth in the gardens. Sorcerers put a croton twig into a creek requesting it to go and catch the enemy; the twig turns into a crocodile which seizes the man. Into the zygomias of skulls brought back from head hunting, croton leaves are inserted. The inside of the club house is decorated with croton leaves. The warriors also after a successful raid deck themselves with croton. At some places of the mainland opposite Kiwai, croton was grown in the gardens, and canoes were decorated with crotons and other bright shrubs¹⁾.

A further argument in favour of the view that Kiwai has been influenced by the stone-using immigrants is the occurrence of the Gaera ceremony on Kiwai, which shows resemblances with some of the feasts of Melanesia which can be shown to be associated with the stone-using immigrants. The

1) LANDTMAN 457 26, 66, 70, 72, 76, 82, 91, 144, 242, 258, 323 f, 336, 351, 375-377, 416, 452, 458 5, RILEY 720 40 f, 47, 185, 235-238, 248, 270, 287, 303, BEAVER 55 142, 173, THOMSON 868 120 f, CHALMERS 128 253 f, D'ALBERTIS 15 II 143.

following is a brief description of these feasts. We begin with the Walaga feast of Bartle Bay where, it will be remembered, we have come across many traces of the stone-using immigrants.

The Walaga is a mortuary feast. For the feast a mango tree is selected in the bush and a track cut down to the chosen mango. Nets are placed on this track to catch leaves and twigs, which may not fall to the ground. After the mango has been cut down, the chips are wrapped in mats, and the tree is carried in a ceremonial procession to the village, where it is erected. Pigs brought by visitors are laid out "in view" of the mango and later they are killed as slowly as possible for a maximum of squealing to be heard by the mango. A chief climbs a mango pole from which he addresses the people. Then food is distributed and dancing takes place. The mango which, after this, is kept in the sleeping house of the men, after a long time is brought out again and a part is broken off and burnt. The ashes are mixed with the food of pigs. This procedure is repeated until the whole tree is finished. Five pigs brought by visitors are named a mango¹). The Soi feasts have this in common with the Walaga feast, namely, that they are mortuary feasts too; here too a mango tree is ceremonially brought into the village, and special cruelty is done to the pigs. Here one mango sapling is counted for three pigs brought by the visitors. Also food distribution takes place and some years later the mango is burned. This feast occurs in Dobu, Fergusson, Normanby, Woodlark Islands, Marshall Bennet Islands, Kitava, and from Sudest to South Cape including Rogeia, Sariba, Basilaki, and Tubetube, i.e. in an area in which we have come across many proofs of the presence of the stone-using immigrants²). The toreha or toleha feast of Milne Bay is also a mortuary feast in which one mango is counted for 5 or 6 pigs brought by visitors, and food distribution takes place. ARMSTRONG is of the opinion that the toleha feast is but an imitation of the Soi feast³). At the identical Gelaria feast "Toi", one mango is cut down for five pigs⁴). Identical with these feasts is the Maduna feast of Mailu, or rather one of its preparatory feasts, the Kanakari or Kanare. This too is a mortuary feast. A mango is cut solemnly in the bush and the bits are collected in nets; the mango is brought into the village in a procession, one mango for every clan. Pigs are brought by visitors and food distribution takes place. Later the mango is cut into pieces which are used in pig magic⁵). The striking similarity of the Soi, Maduna and Walaga feasts has also been pointed out by MALINOWSKI, who considers all these feasts as "varieties of the same ceremonial institution"⁶). The Mafulu, whose culture it will be remembered, likewise shows clear traces of the megalithic culture,

1) SELIGMAN 770 589-606, 650 ff. 2) HADDON 323 247 f, SELIGMAN 770 462 f, 584, MALINOWSKI 524 486, 489 f, 492, WILLIAMS 947 45, 54, etc. 3) ARMSTRONG 712 (1920/21) 43 f, SELIGMAN 770 632. 4) SELIGMAN 770 589 Note 1. 5) HADDON 323 247, MALINOWSKI 526 664-679, 680 f, 684 f, 696 f, SAVILLE 765 251-256, 295. 6) MALINOWSKI 526 677, 685.

have a similar feast, the so-called "Big feast". This is also a mortuary feast during which trees are ceremonially erected in the centre of the village, and the killing of many pigs takes place on the side of a burial platform¹).

The following facts may be advanced in support of the view that these feasts form part of the culture of the stone-using immigrants: The main ceremonial event of the Kanare feast (the preparatory feast of the Maduna) is the erection of a heap of stones in front of the house of the master of the feast²); in the Soi area and in Mailu, the Soi and the Kanare feasts are said to have been introduced and taught to the people by Taufo, the introducer of pigs etc, whom we have recognized as a very characteristic representative of the stone-using immigrants³); at all the places where these feasts are held, there is clear evidence of the stone-using immigrants; and finally it has frequently been seen that the cult of the dead and big pig feasts are quite outstanding features of the culture of the stone-using immigrants.

The Arosi of San Christoval hold an analogous feast, the Airasi feast, and here the association with the stone-using immigrants is once more confirmed. Fox, to whom we owe the description of this feast, has himself emphasized its similarity with the Walaga feast, and the Kolekole feast of the Gaviga (Malay apple) tree of the Banks Islands, which latter is likewise a memorial feast in which the tree is gaily painted⁴). The airasi is a fairly large tree in the forest and is the chief object of the feast. The ceremony takes place in front of the sacred house tawao. In the tawao is a relic of a dead man, such as his hair, and this is used in a divination when the party to cut down the tree is chosen. The party clears a large track to the tree. In bringing in the tree not a single leaf must fall to the ground since this would mean a man's death. After the tree has been brought to the village it is set down in an upright position near the tawao. They surround the tree with a round fence of coconuts inside which there are a number of small square enclosures, their number depending on the number of villages attending. These enclosures are likewise made of coconuts which, like those of the larger fence, are destined to be consumed at the feast. At one corner of each little enclosure there is a live sapling stuck into the ground, and to each sapling a living pig is tied. They also pile up a heap of fruit at the base of the airasi tree. The pigs are killed close by with a great deal of squealing. Before that comes the dressing of the tree with many kinds of ornaments. This dressing is of interest in that it is the complete festal dress of an Araha. Then dancing and food distribution takes place. "The dance (with figures of frigate bird and shark) is clearly an Araha dance". After the feast the tree is put in the tawao and brought out again after some months, when a length is cut off and burnt on the ariari (stone platform) of the tawao, until after successive occasions, the airasi tree is entirely

1) WILLIAMSON 957 125 ff, 958 244 ff. 2) MALINOWSKI 526 669. 3) ARMSTRONG in 712 (1920/21) 42. 4) FOX 263 318, 324.

consumed¹). We are not told that this is a mortuary feast, but the fact that it is the spirit of a dead person who chooses the party that is to fetch the tree, indicates perhaps that this feast also is a mortuary feast. We have seen the Araha to be the most important representatives of the stone-using immigrants, and the fact that the tree is adorned in the dress of an Araha, and that the dance is an Araha dance, clearly indicates that the feast as a whole is an Araha feast, i.e. a feast of the stone-using immigrants. This is furthermore supported by the fact that the feast takes place near the stone-built tawao and ariari, and especially since in this feast the sacrificial pigs are tied to wooden stakes, a custom which otherwise does not occur in San Christoval, and which has been seen to be highly characteristic of the megalithic culture.

This feast is held in exactly the same manner on Saa where it also bears the same name²).

In the course of the Kurtatchi initiation ceremonies of the boys, the men go into the bush and fetch two or three tall trees. Young canarium almonds are frequently chosen, though they are not felled under ordinary circumstances, as their nuts are highly prized as an article of diet. These trees must be pulled up by the roots instead of being felled. The selected trees are brought into the village with blowing of conch-shells and much shouting, and are set up in front of the long house. Each tree is assigned to one group of villages. A live pig is tied up at the root of each tree. Each boy takes off his upi hat and places it at the foot of the tree of his village. He must then climb the tree, in order to show the growth of his hair to the people. As he comes down he must step on the pig which is tied up at the foot of the tree, and make it squeal. At the end of the ceremonies the long house, the trees, and the discarded upi are all burnt. The first-menstruation ceremony for girls also shows some resemblances to this ceremony³). Although in function this feast differs from that of the other feasts mentioned, there are undeniably certain similarities. The tying of the sacrificial pigs to the trees is again particularly suggestive.

Having now discussed the wide-spread distribution of these feasts in Melanesia, and having shown their connection with the stone-using immigrants, we can return to the description of the Gaera ceremony of Kiwai. The people say that this ceremony came from Budji. The men cut down several young trees, which they carry to the place selected for the ceremony. There a dance is held, during which the men carry the trees aloft, moving them backwards and forwards. The dancers sing certain songs the meaning of which suggests a journey from Adiri, the land of the dead, in an easterly direction, or which refers to a dance taking place in Adiri. The Gaera culminates in the erection of the "harvest" tree. A fairly large tree with many branches is felled by the younger people who cut off the

1) Fox 263 279, 318-324, fig. p. 320. 2) Ivens 403 165. 3) Blackwood 76 234-238, 254-257.

branches. The top of the tree is left intact. The tree is then stood upright. At the last Gaera ceremony celebrated at Mawatta, one large tree only was put up, but formerly several trees seem to have been used at the same time. In Kiwai they used to erect a separate tree for each totem group in a row on the festal ground. Two men stood on the top of each tree. An enormous mass of garden produce is hung up on the different parts of the Gaera tree. The whole tree is decorated with gay-coloured boughs and other ornaments. At the end of the feast the garden produce piled up on the tree is distributed among the people. Everybody replants a little of the food in his garden, which is thought to benefit greatly from it. The empty Gaera tree is climbed by the master of the ceremony, who addresses the people¹). Although LANDTMAN calls the tree a harvest tree, and RILEY speaks of the Gaera as a yam festival, the fact that the songs allude to the spirits of the dead is perhaps an indication that this feast also was originally a mortuary feast.

From all these data it is evident that Melanesian influences independent of the megalithic culture have been at work in Kiwai, but it also follows that the influence of the stone-using immigrants is felt here, although it does seem to be somewhat overlaid.

Since the myths of Kiwai, which are of interest to us, are likewise known by many of the neighbouring tribes, we shall discuss the mythological evidence later on. But now we shall deal with the question as to what traces of the stone-using immigrants can be found among the neighbours of the Kiwai.

Gogodara: Among the Gogodara there are two different physical types, one Papuan with arched broad noses, broad cheeks, and thick lips, and the other, with narrow face, thin lips, and narrow nose. The hair is frizzy, and the skin very dark. These features and the great prevalence of brachycephaly among them, creates a strong resemblance between the Gogodara and the Kiwai. Their brachycephaly, according to LYONS, "gives fresh support to the view of a north-to-south migration of the costal brachycephals"²). The Sapota people, 30 miles up the Bamu, are of medium size, and the people of the Aworra, a tributary of the Bamu, 60 miles from the coast, are of Papuan race. The farther up the river one goes, the smaller in stature the natives become. Farther east, between the Bamu and the Gama River and on the Gama River itself, the people are of very dark colour and resemble the Kiwai. The people of the Turama River are of dark skin also, and the people of Goaribari Island, at the mouth of the Omati River, are of semitic type. At the eastern end of the Papuan Gulf, the cephalic index and the stature are rising³). It has been seen that there were some light-skinned

1) LANDTMAN 457 383-391, 394-396, BEAVER 55 180, RILEY 720 253. 2) LYONS 505 330, 358, HADDON 323 21, 257, 320 334, 350, BEAVER 55 203. 3) HADDON 325 415, 329 86 f, BEAVER 55 217, 234, 239, MURRAY 595 18.

individuals among the Kiwai. These are apparently the last vestiges of a light-skinned people, whose influence has been very clearly seen on the Middle and Upper Fly. Proceeding to the east, this influence gradually diminishes, in spite of the cultural influence of Kiwai. In this area Melanesian influences as well as vestiges of the stone-using immigrants can be traced. We shall understand later why the cultural and racial influences of the stone-using immigrants have been felt so little in this region. The language of the Gogodara is Papuan ¹). Besides cultural influence from, and actual mingling with the Kiwai, there are many cultural resemblances to the Marind anim and to Lake Murray on the Middle Fly ²). Kava-drinking and the conception of the devouring monster have already been mentioned as indications of more recent influences of culture in this tribe. Only very little is recorded regarding trading relations, and to-day the people are apparently relatively isolated. Their arrows seem to come from the Torres Islands via Kiwai ³).

In view of the culture contact with the Middle Fly, it is highly characteristic that Barimo village, the oldest settlement of the Gogodara, is said to have been founded by a man called Ibari, who with his sons and daughters came here from Wabira, which the people declared was in the north-west. Now, this man Ibari planted in his gardens coconuts, taro, yams, betel nut, and kava, which he had brought from Wabira. He also taught his sons all crafts, and instructed them in tribal lore and organized them in clans. After fruitless searching for foreign women as wives for his sons, he instructed them to marry their sisters, which they did. Soon after, Ibari went back to Wabira ⁴). A more detailed description is not given about Ibari and his people, but the fact that they were immigrating culture-bringers, that they introduced food plants and particularly the coconut, is reminiscent of the stone-using immigrants. The fact that Ibari instructed his sons to marry their sisters would, if PERRY's arguments are accepted, be a typical feature of the stone-using immigrants.

Stone-work has not been found in the Gogodara region but, according to a tradition, the two moieties of the tribe lived formerly in a big stone house. This tradition is likewise known by the people of the Bamu and Turama River ⁵). According to another tradition of the Gogodara, one moiety came from the north, i.e. from the interior, and the other from the south coast. They created everything. Those who came from the north changed later into the stars and the sun, whereas the others retired into the earth ⁶).

Sacred Plants. Croton, dracaena, and cordyline are of great importance with the Gogodara. The different varieties are used as badges by

1) HADDON 322 193, WIRZ 970 374, BEAVER 55 201, 56 204. 2) See WIRZ 969 33, 82, 970 371, 383, 386, 409, 451, WILLIAMS 946 XXXII, HADDON 320 352. 3) WIRZ 970 372 f., HADDON 320 343. 4) LYONS 505 329, 332, 353 f. 5) WIRZ 907 377. 6) WIRZ 970 377-379, 387.

the various clans, who decorate themselves with these plants at feasts. WIRZ has published a list of the names of many croton and dracaena varieties, together with the clans to which they belong. Some of the clans even call themselves after the name of their respective croton or dracaena ¹).

Around and upon graves are planted the varieties of croton, dracaena, or cordyline which correspond to the clan of the dead. Signs erected on roads in order to communicate a certain event to passers-by, are generally made out of these shrubs. The people decorate their canoes with the dracaena or croton variety which corresponds to their clan. In the gardens, croton, dracaena, and cordyline are planted; in the garden of a dead man, a little hut is erected as a taboo sign around which crotons and dracaenas are planted "in order to make the sojourn of the ghost as agreeable as possible", because after death it retruns frequently to its plantaion. Along both sides of the long-houses rows of croton are planted ²).

It seems that the characteristic broad avenues are found here again, for BEAVER ³) records that broad, open main roads bordered with crotons, dracaenas, and other bright shrubs lead right up to the long-houses, which are surrounded by a large court-yard.

It might finally be added that on the headwaters of the Aramia, croton and other ornamental plants are grown in the gardens ⁴).

Prehistoric objects. I am not aware of any prehistoric objects in the Gogodara region, but LYONS gives the following record which, I think, is worth mentioning: "Agagaba is a stone lamp. It is a flat stone with a concave surface on one side. Its concavity is made by grinding with another stone. The inflammable sap of a tree... is used as an illuminant" ⁵). This information is the more interesting since a prehistoric stone in the form of an oil lamp was found in the Mt. Hagen District.

Bamu River: The culture and language of this region resemble to some extent the culture and language of Kiwai ¹). Trading relations exist with

1) The names of these croton varieties are: biridama, suruba, saragu-patama, gaugaja, kokaja, sibiri, warugi, dibisara; the dracaena varieties are called: kurigibi, sereo, boriwamo, busu, kiorema, kaboja, suruga, aubu, ipisa, gjagja, sagia-titi, rawira, gerbara, kukua, kenekene, kokohe, ovame, sikiri, aribisik, auma, imoa, karakera, goroba, busisi, jasiri, dedegope, ore, didiga-upe, sese. WIRZ 970 393 f. Some of these plants are also recorded by LYONS as clan badges; he speaks of them, however, as cordylines. 505 333. The botanical names given by WIRZ are not always very precise; for instance the dracaena varieties imoa, karakera, goroba, busisi, jasiri, dedegope, ore, didiga-upe, sese, etc. referred to above, on another occasion he calls croton varieties. WIRZ 970 459, 470. And the croton varieties biridama, suruba, saragu-patama, gaugaja and kokaja he speaks of elsewhere as cordylines. WIRZ 970 457. WIRZ records furthermore the croton varieties sisira and moitbua, and the dracaena varieties era, titi-mumu-a, sagero. WIRZ 970 457, 459, 470, 485.

2) WIRZ 965 78, 969 33, 86 f, 970 380 f, 393-395, 408 f, 430, 438, 440, 451, 455, 457 ff, 468, 470, 485 f, HADDON 320 336, LYONS 505 334, 336, 342, RILEY 722 175) 3) 55 197, 204, 56 412. 4) HURLEY 400 162. 5) LYONS 505 347.

the Turama and Omati Rivers as well as with Kiwai²). Something reminiscent of the devouring monster seems to occur here again³). They have adopted the Moguru ceremony from Kiwai in which dracaenas are used. In these ceremonies, dracaenas are kept in the hands by the participants and dracaena branches are inserted into the belts of the novices; during these ceremonies the club house is decorated with dracaena⁴).

Turama River: On the Lower Turama River, where the language is related to that of Kiwai, the occurrence of the Muguru ceremony⁵) points likewise to influence from Kiwai. The Lower Turama people have relations with the neighbouring coastal regions Goaribari, Kerewa, Dopima, and Goru, and the Wariadai of the Middle Turama have marriage relations with the Baru people of the coast. On the other hand, the Wariadai have trading relations with the Hawoi, who live somewhat further up the river⁶).

In the Moguru ceremony of the Turama estuary, the club house, as in Kiwai, is decorated with dracaena leaves, and a dracaena branch is inserted into the belts of the novices; also when a skull is captured, "sacred" dracaena is hung in the club house; one of the villages was situated on the top of a hill, the slopes of which were covered with crotons⁷).

Goaribari Island and Kerewa: In both these districts, as well as on the Wapo River, the language is related to Kiwai, and the Muguru ceremony occurs here also as far east as Kiribaro (Nepau)⁸). The racial characteristics also of the people of the Kikori Delta resemble those of the Fly Delta⁹). On Goaribari Island some traces of the devouring monster are still recognizable¹⁰).

All that BEAVER says of Goaribari Island is that croton leaves are worn¹¹). In Evorra village, further to the east, not far from Port Romilly in the vicinity of which light-skinned people were found, hibiscus and croton were planted in front of the houses¹²).

Inland of the Papuan Gulf: In the inland region of the Papuan Gulf, many light-skinned people have been encountered. Thus the Mati, Ututi, and Irumuku, who live near the point where the Sirebi River falls into the Kikori, are light-skinned, "so light indeed that they suffered from sunburn when in gaol"; and in appearance and language they differ from their coastal neighbours the Kerewa of the Aird Delta¹³). If it is borne in mind that these light-skinned people live very near the coast where light-

1) WIRZ 969 7. 2) BEAVER 55 226. 3) HADDON 323 258. 4) WIRZ 969 58, FLINT 253 38 speaks of croton in this connection. 5) WIRZ 969 8; 712 (1922/23) 18 (1923/24) 17. 6) WIRZ 969 9 f; 712 (1921/22) 51, (1927/28) 21. 7) WIRZ 969 58, AUSTEN 31 347, 349, RICH in 712 (1935/36) 23. 8) HADDON 325 22 f, 258 f, 228 177 f, AUSTEN 29 468, WIRZ 965 134. 9) HADDON 329 87; 712 (1893) 43. 10) WIRZ 969 350. 11) BEAVER 55 252. 12) BEVAN 72 30. 13) CHINNERY 154 448.

skinned people are unknown, it is evident that this light skin can only be due to difference in race, for the environmental conditions are almost the same in both regions. STANFORTH SMITH, who travelled through the wide area of the Kikori, up from the mouth of the Sirebi, via Mt. Murray, Sambrigi Valley, Mubi River, Susamiro River, and Upper Kikori River, gives the following description of the racial characteristics of this area: "The native inhabitants of the interior do not appear to be a homogeneous people; racial distinctions are apparent that seem to indicate a mingling of Papuans and Papuo-Melanesians, to use the terminology of Dr. Seligman. Some of the inhabitants of a village were dark-skinned... in not a few instances the somewhat prominent nose was arched, presenting the appearance of the so-called semitic type. Other villagers again were usually light-skinned, more the colour of a Samoan" ¹).

Our knowledge of the cultures of this area is not very wide. Of Bari village, not far from the Ututi, the following is recorded regarding the use of sacred plants. The people have the habit of tying upon croton trees growing around their village the bones of pigs, cassowaries, etc. This is done for the purpose of a successful hunt ²).

It is difficult to determine exactly how far south the influence of the inland people reaches. It might, however, be mentioned that the people of the two villages Paia-a and Nagoro on the Lower Omati, although similar to the Kerewa in language, customs, and appearance, do "actually spring from a different stock" ³) (From the inland?). The Pepeha people between the Paibuna River and the Lower Turama, who are an offshoot of the bush tribe Oberi, (between the Turama and Bamu), although influenced in their culture by the Turama and Kerewa, are linguistically quite isolated ⁴). CHINNERY records: "In physique and general culture the Paibuna and Pepeha people resemble the other bush groups, and there appears to be a slight linguistic affinity between them as well, for a native of Mati could understand some of the Gibidai dialect" (i.e. near Pepeha) ⁵). These Mati we have seen to be light-skinned, so that this relation seems to indicate that we are actually faced here with the terminal points of the culture coming from the interior. It must, however, be emphasized that this is purely a provisional point of view, since too little is known regarding these cultures. The Moreri tribe, living somewhat further to the east of the Irumuku, resemble the Irumuku in physic, understand their language and have friendly relations with them ⁶). The languages of the other tribes inhabiting the area between the Upper Kikori and the Upper Purari, viz. the Sesa, Gorau, Ibu-Kairi, including the Moreri, resemble one another, a fact which "would appear to point to the possibility of a common origin, and would tend to make one believe that they are all migrants from the north" ⁷).

1) SMITH 785 323 f. 2) FLINT 712 (1921/22) 148. 3) 712 1920/21 63. 4) WIRZ 969 10, AUSTEN 31 342. 5) CHINNERY 154 450. 6) CHINNERY 154 449. 7) 712 (1925/26) 98.

On the other hand, we are told that in the whole of the inland region between the Upper Kikori and the Upper Purari light-skinned people are to be found¹). It will be remembered that farther to the north-east, on the tributaries of the Upper Purari, where there were park-like dancing grounds with casuarinas as well as draining ditches, many light-skinned people had been encountered, as well as on the headwaters of the Purari itself²). It is true that there were no draining ditches in Purumbu village on the Upper Purari³), thus indicating the probable limit of this element, but light-skinned people occur also on the lower parts of the river. Thus, for instance, light-skinned elements occur among the Biroe people on the Purari, near Mt. Musgrave, and even lower down the river the Jari people are composed both of very dark and light coloured individuals, and not far from the coast in the vicinity of Port Romilly, light-skinned individuals were also found⁴). On the other hand, the Kailu and Ukerave inhabiting the Purari Delta are generally dark-skinned, and among the Vaimuru, and Maipua on the coast, as well as in the Namau District, dark-skinned Papuan elements prevail⁵). Moreover, the cephalic index of the Maipua and the wider Purari Delta is very low (70-73), so that "we may safely regard them... as belonging to a primitive stock"⁶). It is of the utmost importance that in MACGREGOR's opinion the light-skinned Biroe have a Melanesian language⁷), although this opinion cannot be considered conclusive.

The predominance of dark-skinned elements on the coast of the Papuan Gulf from east of Kiwai to the Purari Delta, is apparently due to the fact, frequently confirmed, that culture movements took place in this region from west to east. The extreme limit of these movements can clearly be perceived in the Purari Delta. The Vaimuru, whose original home was Kiwai, say that they came from Urama, just a little to the west of their present home, indicating by this that Urama was probably the last stage on their migration to Vaimuru. This west-easterly movement is also confirmed by the tradition of the Kaimare, who are likewise said to have come from Urama, which the Maipua also indicated as the starting point of their migrations, and from which place they came to their present home via Kaimare, where they drove out the aboriginal Moreaipi to Orokolo in the east. Kairu was founded in a precisely analogous manner by people coming from Ukirawi a little further to the west⁸). It has already been seen that the Purari Delta, or the region adjacent to it in the west, was the limit of the linguistic influence of Kiwai, the occurrence of the Moguru ceremony, the modelling of the skull, etc. We are thus faced with two different kinds of migration,

1) MURRAY in HIDES 358 XI. 2) MURRAY 595 310. 3) HIDES 358 178.
4) MURRAY 595 287, CHALMERS and GILL 134 119, 135, 143, BEVAN 72 18. 5) CHALMERS and GILL 134 120 f, 135 144, CHALMERS 127 70, HADDON 325 414, HOLMES 395 5 42-44. 6) HADDON 325 414. 7) MURRAY 595 288. 8) WILLIAMS 945 98 f, HADDON 329 84, CHALMERS 127 67 f 128 110, HOLMES 395 24 f 148 f, 192, 287.

one, as HADDON has pointed out, coming in several parallel waves from the north, and the other proceeding in a west-easterly direction. We have reached the conclusion that the immigrants who introduced the use of kava and the conception of the devouring monster were Melanesians, but probably not stone-using immigrants. This view is confirmed by the fact that these two elements of culture are entirely lacking amongst the light-skinned people of the interior, whom we are bound to consider as the southern extension of the light-skinned people of the far interior of New Guinea.

Besides relations with the west, the Purari Delta has close cultural contact with the Elema tribes ¹⁾ and trading relations with the Goaribari, Urama, as well as with the Ipi-tribes of the interior, and if one proceeds from the west to the east, the Purari Delta people are the first to have trading relations with the Motu. They make raids up the Purari River. It might further be added that the Goaribari and Kerewa make raids against the inland people of the Kikori. The Kerewa extend their raids even to the Sirebi River, and trading relations with the inland people also seem to exist ²⁾.

It may be asked whether it was not this hostile attitude of the coast people which prevented the light-skinned people of the interior from descending to the coast.

Sacred Plants. In the Purari Delta the kaitemunu monsters are decorated with croton. When the boys after their seclusion return to their village, they are flicked with croton twigs by their relatives who also decorate themselves with croton. There are even certain men, the "croton men", whose office it is to decorate the men's house with croton at the end of certain feasts. Poles, to which certain masks are attached in front of the men's house, are decorated with croton leaves. In Apiopie village crotons are planted at the head and foot of a grave. Speaking of the Papuan Gulf in general CHALMERS and GILL record that the wearing of light-coloured croton is a token of peace, and dark croton a token of war ³⁾.

Mythological evidence. We have already pointed out the more recent influences in the mythology of Kiwai, indicating a connection with the mythology of the northern coast of New Guinea.

The following myth is narrated by the Kiwai: A man married the daughter of a snake without knowing who her father was. The woman summoned her snake father to look after her baby while she and her husband were working in the garden. On one occasion the man returned home alone, and on seeing the snake he killed it. He was distressed on hearing whom he had killed and the snake was brought to life again ⁴⁾.

1) HADDON 326 177, 323 26, MURRAY 595 161 f. 2) WILLIAMS 945 15 26, 125, 212, MURRAY 595 189 f, 231 253, HADDON 328 180, WIRZ 969 69, CHALMERS 127 68, 70, 128 112, CHALMERS and GILL 134 121, HOLMES 395 104 f, 255, HURLEY 400 252. 3) WILLIAMS 945 7, 21, 115, 163, 948 366, 383, HADDON 326 179, CHALMERS 128 210, CHALMERS and GILL 134 234 Note 1. 4) LANDTMAN 457 316.

We have already come across this myth in some of the New Hebrides where, in some instances, the coconut sprang from this snake. This story was furthermore the origin myth of the figona Hatuibwari of San Christoval, and the similar figona Walutahanga of Malaita and Ulawa, beings whose obvious relationship with the stone-using immigrants we have shown. The sole difference is that in most of these stories the snake was female. HADDON has already remarked upon the singularity of this myth by saying ¹⁾: "That the origin of certain elements of the culture of the Kiwais must be looked for elsewhere is evident from the folk-tale... which tells of a man married to the daughter of a snake, a version of which was collected by Dr. E. Fox in San Christoval and also in the Banks Islands ('The Threshold of the Pacific' p. 82 f)".

Another myth tells the story of a fierce boar, a hawk and a crocodile which killed many people, so that everybody fled to another place with the exception of a certain boy and his sister who were left behind, for their parents were dead. They dug a hole in the ground hiding there. Instructed by his parents' spirits the boy killed the monsters. He had intercourse with his sister, and she felt ashamed and left him ²⁾. It is remarkable that the hero of this story, whom we have repeatedly seen to be a representative of the stone-using immigrants, had incestuous intercourse with his sister.

The following story gives additional strength to the view that the Kiwai were influenced by the megalithic immigrants. The skin of one man was white from his birth and a friend of his tried to make his look the same by scorching himself in the fire, but he was burnt to death ³⁾. This agrees with the roasting of Puungilalamoa and his brother of Saa, likewise intended to produce light skin, and it is furthermore similar to the cooking ordeal of Warohunuga (Qat of San Christoval), that of Bego of Buin and the two brothers of the Shortland Islands, all of whom we have considered as representatives of the stone-using immigrants.

Among the very many myths recorded in Kiwai, that of Sido (or Sida, Sidor, Said, etc.) is of particular interest ⁴⁾. The Kiwai hero Sido is very widely known from Boigu Island in the west as far east as the Purari which we have judged to be the limit of the Kiwai influence. He is also known in the Torres Islands. East of the Bamu he appears under the name Hido, and under the name Iko in the Purari Delta. In spite of some variations, these myths agree quite remarkably in the whole area. The occurrence of this myth in some of the Namau villages of the Purari Delta is explained by the fact that the Vaimuru were shown by AUSTEN to have come originally from Kiwai Island. The principal incidents of the Sido myth are as follows. He was born in a more or less miraculous way, according to the different ver-

1) In LANDTMAN 457 XVII. 2) LANDTMAN 458 57, 504. 3) LANDTMAN 458 50.

4) LANDTMAN has expressed the opinion that Sido and Soido are two different beings. HADDON, however, considers them as one personality only, (711 I 377 f) and owing to the considerable resemblance of their stories, we agree with HADDON's view.

sions¹⁾, and was reborn in one of two women who were joined back to back. He was eaten by one of them in the shape of a shellfish or, according to another version, in the shape of a cassowary's egg by which she became pregnant. He grew up with miraculous rapidity and separated his foster mothers. The place of his birth varies according to the different versions²⁾. He married a certain woman, differing also according to the various versions³⁾. Sido met his wife Sagaru at a dance at Iasa (Kiwai). He gets there by climbing a tall palm, which bends over until it reaches the long-house at Iasa, where he secured the top of the tree to a post. But during the dance some rivals of his cut the string and the tree goes whizzing back to his home Uuo. According to the Saibai version, this tree is at first very small. When Sido sat on it, it began to grow till it was very high. According to the Erub version, Sido planted a certain seed in the ground which grew to a large tree, by which Sido and a certain woman were carried up to the moon, where Sido left the woman, going away on a cloud. The woman's face is still visible in the moon⁴⁾. Quarreling with his wife Sagaru in the Kiwai version, or his sister Hiwabu in the Gope version, about some trifle, the wife left him. Another man who wants her, causes a tree to become quite small. When Sagaru sits down on it, the tree resumes its natural height, and she is lifted up. Sido tries in vain to cut the tree, and finally summons the wind, which blows the tree over, but Sagaru is hurled to her lover (Kiwai version). According to the similar Gope version, the stumpy tree on which the woman sat grew up, apparently out of itself and took her up into the sky. To get his wife back Sido causes a climbing vine to grow into the sky; the vine reaches the woman but is not strong enough to take her back. Sido was then killed by his wife's lover Aiparu or Meuri, or by his wife (in the Gogodara version), or by accident (in the Saiba version)⁵⁾.

According to the Mawatta version, Sido (here called Sidor), after a quarrel with his wife Sigaru, went up to the top of a tree. His wife tries in vain to fell the tree, and finally the wind blows it down. On this tree

1) In Kiwai he came out of the ground, in Gope he is born normally as the child of a man and a woman, and in the Purari Delta he is the son of a cassowary.

2) He was born in Uuo on Kiwai according to the Kiwai version; in Nepau, according to the Gope version etc. 3) In Kiwai he married Sagaru; in Wasi Kussa a woman who is seduced by two men, whereupon he kills her; in Murray Island he marries Pekai; in Budji a "bushman" woman who is outraged by a bushman, whereupon Sido kills her; in Adiri or Dudi he marries Diryo, Gopu or Darogo; in Nepau he has incestuous relations with his sister; in Urama he married Iua, and in Gogodara, Siruro or Babuo.

4) According to a Wabuda story the moon is inhabited by a man named Sagome, who with his mother Gebai lived at Dibiri. Sagome became enamoured of his mother and wished to marry her, but she refused, so that Sagome went away to the moon which he reached by climbing up a sago palm. As he climbed, the sago palm became longer and longer until it reached the moon and then it sank back again to the earth. BEAVER 55 150 f.

5) In the Gope version Sido is only injured but not killed.

Sido is carried by the tide to Dibiri, the dwelling place of Meuri who, according to this version, is Sido's brother. Here Sido has intercourse¹⁾ with his brother's wife, which caused her to conceive. In the ensuing fight between Sido and Meuri, Sido is killed. Thus, he was the first man to go to Adiri, and henceforth men die. In many versions it is, however, recorded that Sido did not die at all, but disappeared in a miraculous manner without anybody knowing where or how. It is therefore generally believed that he will come back, and that a new and better age will then begin. The christianised Papuans regard him actually as a Messiah. He wandered to and fro in this great area, but the directions of his migrations differ according to the different local versions. According to the Kiwai story, he travelled in a canoe from Kiwai to Gebar, Boigu, Wasi Kussa and then to Murray Island; according to a Dibiri version, he went to Budji; after his death his soul continued its wanderings, and went in a western direction from Kiwai to Mibu, Parama, Daru, and Geavi on the mainland, from where he followed the coastline; in Paho Island on a flat rock, three or four of his footprints are still to be seen, and a little mud left there by his feet. According to the Torres Islands versions his footprints are to be seen on the rocks at Mergar, Wed, and Dauar. He then went via Mabudauan to Boigu. Proceeding further west he finally reached Adiri, which is supposed to be a long distance from Boigu. According to a Gope version, Sido (here called Hido), after the incestuous intercourse with his sister, left his home Nepau and with his sister travelled westward until he came to Dudi, south-west of the Fly estuary, the home of the dead of this region, and here he remained for a long time. According to another Gope version, Hido lived at Mibu Island in the estuary of the Fly. Following his wife who had left him, he first went to the west to Daru Island and even to the Morehead River. Since his wife "does not want to go that side" he travels eastward to the Dibiri Creek, passes the Gama, Turama, and Kikori Rivers till he comes to Aird Hill (Neuri). After the fight with his wife's lover at this place, he and his wife returned to Kiwai. With regard to the mention of the Morehead River, AUSTEN says: "The mention of this latter place seems to me to be an interpolation by the raconteurs, signifying that Hido travelled as far west as it was possible to go, i.e. as far as the furthest western place of which they had ever heard"²⁾.

In Vaimuru (Purari Delta), Sido (here called Iko) is said to have come from the west, though no one can say from where exactly. Some would have it that Iko was a man of Urama; but most agree that he was born and lived in Aura Koripi, whence he came down to Urama, from where he journeyed to the Purari, where he dwelt and died³⁾. Yet others say that he

1) According to the story it is digital intercourse. 2) AUSTEN 29 472. 3) Aura Koripi was said to be Pivoro, near Iova. Aura Koripi is also a vague term for the Kikori River region. There is also a tributary of the Era River, called Iova, and a tributary of the Pie river is also called Pivoro. Therefore places cannot be located with certainty.

came faring along the sea shore, passing the great rivers until he reached the Purari. "Only this seems to be sure, however, that he came out of the west, first to Urama, and then to the villages of the Purari". After his sojourn in Vaimuru he went to the other villages of the Purari and Era Rivers in the following order: Kaimari, Maipua, Iari¹), Ukiravi, Baroi, and then to Ipiko, Eva, Maipua (on the Era River), Kipaia, Kwoi, Urama, Kiriparo, and thence back to Vaimuru, where he died.

According to the Saibai version, Sido came to Saibai from Sadoa, "where the Tugeri men come from". According to the Mabuia version, he came from Pab on the mainland beyond Boigu. He travelled from Boigu to Saibai, Dauan, Gebar, Tutu, Damut, Erub, Mer, Ugar, and returned finally to Mibu Island. According to the Mabuia version he travelled to Gebar, Yam, Masig, Erub, Mer, and returned to Kiwai. In Gebar Island, Sido went to a hill in the middle of the island and where he placed his feet there is still a black stone. According to the Mer and Erub version also, he came from Daudai on the mainland. He is the great culture hero who has introduced many things. In Wasi Kussa he kills wife and cuts her to pieces. Yams, sweet potatoes, bananas, coconuts and sago spring from the pieces. The same happened in Budji; taro, yams, sweet potatoes, bananas, and sugar-cane sprang from the pieces of the woman's body²). Before he came to Murray Island there was no food there, but after he had married Pekai, there was plenty of food on the island. During his wanderings, all garden produce eaten by him passed down into his member, which by this became very large. Then he was carried by a frigate bird to several islands of the Torres Straits, viz. Boigu, Dauan, Gaba, Yam, Erub, etc. and finally to Mer. Everywhere he asked the people to give him a woman, but either they refused to do so as his member and scrotum were so large, or else at some islands they gave him an old woman. At these places he left none or only a few of his food plants. In Murray Island they gave him the beautiful Pekai. Having intercourse with her, he shook out the semen all over the island and all of the food and fruits he had carried in his member—coconut palms, bananas, yams, taro, etc. — began to grow there. Since his member was so large, Pekai was killed, but Soido restored her to life. Soido's genitals shrunk to their natural size after they had been emptied. When Pekai finally died, she became a stone shaped like a woman. It was kept a long time on Murray Island, but was broken later on, and now only some fragments remain. Some of them have been taken as far as Mawatta and Kiwai to be used as garden medicine. In Adiri also, there was no fire, no houses and no gardens, all of which were provided by Sido on his arrival. Here, the food plants come forth from his semen in the same way as in the Murray Island version. According to the Purari Delta version

1) Here too his story is known. WILLIAMS 945 255. 2) Regarding another version of the origin of the banana, see LANDTMAN 457 93 f.

the fish caught by Iko transformed themselves into coconuts, sago, and betel palms, hitherto unknown to the people¹).

In Vaimuru village (Purari Delta), Iko was credited with the introduction of the "kaiemunu", "though in no other village was it ever suggested that he had introduced the kaiemunu"²). To the ancestors of the Vaimuru, who formerly lived under the ground, he brought the stone axe, and showed them how to build the first house and men's house, and taught them the kinship rules, the making and use of drums, and also gave them coconuts, sago, bananas, and fire. The bull-roarer and hunting magic were also introduced by him. According to a Purari Delta version, it was Kiko who put the moon into the sky. According to the Saibai, Mabuiag, and Mer versions, on his wanderings to Mer he left food plants (coconuts yams, sweet potatoes, bananas, etc.) on Saibai, Damut, Erub, and Mer but little or nothing on the other islands he touched, since they gave him only old women, whereas in the former islands he received young ones. In some places he instructed the people in their language. On Erub he planted sago also, and on Dauar and Mer the screw pine.

Unfortunately, very little is recorded regarding the racial characteristics of Sido. According to the Purari Delta version, the people of Urama stared at Iko when he came to them saying: "Who is that giant of a man?" Also by one informant in the Torres Islands, Sido was said to be a giant, but his exact height was uncertain³).

The direction from which Sido originally came to this country cannot be inferred from the numerous accounts regarding his wanderings, since the directions of these wanderings differ according to each local version. But there is no doubt that he came to the Purari Delta from the west and to the Torres Islands from the mainland. I think we may accept HADDON's opinion who says: "I am inclined to regard the Soida myth as belonging to the most easterly of the migrations vaguely connected with the Marind and allied peoples, and that this special migration reached the coast at the mouths of the Wassi Kussa and Mai Kussa. Perhaps the Soida myth reached Kiwai from the northern coast of the estuary of the Fly, but evidently there was a belief in a spirit land to the west (i.e. Adiri) which might imply that the myth came from the west"⁴). LANDTMAN, in fact, does not concur in associating the land of the dead with the country or direction whence the people have migrated, as HADDON himself mentions; but it should be borne in mind that the Gogodara also locate their afterworld in the west (Dudi) and that the Marind anim, whom, or at least part of whom we regard as the

1) There is also another story of the introduction of the betel palm, recorded by WILLIAMS 945 253. 2) WILLIAMS 945 145. 3) 711 I 40, 248, 375-379, V 28-36, VI 19-23, WIRZ 69 101 f, 970 427, 476-478, 480 f, WILLIAMS 945 145, 231, 248-255, LANDTMAN 457 14 f, 73 f, 76, 104, 284-290, 318, 426, 432 f, 458 95-124, BEAVER 55 104, 176, BEARDMORE 51 465 f, AUSTEN 29 468-475. 4) HADDON in 711 I 377, 379 f, in LANDTMAN 457 XVII f.

most western branch of these migrations which crossed New Guinea, locate their afterworld on the eastern bank of the Fly¹). Furthermore, we shall see that the analogous culture heroes of the Trans Fly District are believed to have come from the north, so that it can easily be imagined that some of them after having reached the coast continued their migration in an easterly direction.

From this it is evident that HADDON also considered Sido as belonging to one of the more recent culture migrations which reached this area. Does this mean that he is connected with the migrations responsible for the introduction of kava and the conception of the devouring monster? HADDON does not say, but it is quite improbable, since kava is unknown in the Torres Islands²), to where many of Sido's migrations also extended, and where he is widely known. But are we justified in considering Sido as a representative of the stone-using immigrants? It is evident that in the numerous myths, Sido is also credited with the introduction of some elements which are not typical of the stone-using immigrants, but this is due to local variations. On the other hand, there are the following incidents which strongly recall the stone-using immigrants; Sido introduced food plants, the coconut among others, his footprints are still to be seen; the lengthening of the tree occurs again (although the persons who cause this vary), also the theme of the bending of the tree, found in some cases to be connected with the miraculous growing of the tree, occurs here again. Sido's incestuous relations with his sister would correspond with what PERRY considered to be a characteristic feature of the stone-using immigrants. In the Mawatta version, he seduces the wife of his brother who thereupon kills him; an incident which certainly reminds one of the usual adultery story of the antagonistic brothers of the stone-using immigrants. His growing up quickly, and his final departure to an unknown country, have been found to be typical of the stone-using immigrants. The theme of the coming forth of food plants out of his body, has been found in connection with the wife of Kelibob of the Bogadjim, and we have considered Kelibob to be a representative of the stone-using immigrants, although there is nothing to connect the other analogous women to whom this incident is attributed with the stone-using immigrants. That Pekai became a stone in the shape of a woman will be discussed later on. Like many of the other stone-using immigrants, Sido taught the people to build club houses, and like them, he ascends into the sky or follows his wife into the sky. It is also characteristic that, according to one version, he was carried by a frigate bird, since this bird has frequently been found to be associated with the stone-using immigrants. Finally, it should be pointed out that in the whole of Melanesia no other culture is known which possesses such pronounced migratory tendencies as the stone-using immigrants, so that also in this

1) WIRZ 963 67. 2) 711 IV 141.

regard Sido is similar to them. For all these reasons I am inclined to believe that Sido is a representative of the stone-using immigrants.

In these circumstances it is indeed striking that so little stone-work occurs in this region. I am not prepared to declare that the conditions of the environment are the cause of this, since this whole study has shown that only cultural reasons are decisive, and that megalithic stone-work has been found to occur also in alluvial regions. But even a study of culture contact must not overlook the fact that environment may at least have had a modifying effect. Now, it is a fact that the whole region of the Fly estuary, as far as Macrossan Island, the area of the Gogodara, and wide areas of the coast east and west, are of alluvial character, and only at Mabudauan Hill in the west does rocky ground come to the surface¹). But we shall see that even this lack of stone is not the only reason for the rareness of megalithic stone-work in this region.

In Kiwai there are a number of other mythological beings who are credited with the introduction of the same or similar things as Sido. Thus, the mythical man Marunogere, who lived at Manavete, introduced the first pig, the Moguru ceremony, the first coconuts, the dog, the first long-house and men's house, totems, etc. He also created death and died, finally, himself²). These facts are certainly in favour of his being a stone-using immigrant, but nothing else is recorded about him.

The mythical woman Abere of Waboda Island, according to a Kiwai story, once asked a man of Manavete to take her over in a canoe to Dudi, and when she arrived there she made banana trees. Abere and her people built a darimo in Dudi. The house had just been completed when they pulled it down. They tied all the timber together making a raft, on which they sailed away from Dudi, but the fastenings of the raft broke, and they all fell into the water. At last they arrived in Kiwai. Some of the plants which they had brought with them were saved, and so they planted bananas, yams, taro, sago, and other garden produce. All these plants were first brought to Kiwai by Abere³). But nothing more is recorded regarding this woman which would permit her to be more definitely classed as a stone-using immigrant.

The probability of these culture bringers belonging to more recent migrations in this area is strengthened by a tradition of the Bamu and Turama River people, according to which the coconut was introduced to this region from Kerewa not very long ago⁴).

The creeks of one of the islands in the Fly Delta, according to a Kiwai myth, were produced by a legendary woman who fought the people with a paddle from her canoe. Wherever the paddle fell, a creek was made⁵). We are not told whether this woman is identical with Abere "who once

1) LANDTMAN 457 1 f, 64, BEAVER 56 413, AUSTEN 33 435, WIRZ 970 373. 2) LANDTMAN 457 4, 19, 97, 114, 193, 357, 365-367, 442 f, RILEY 720 276 f. 3) LANDTMAN 457 94 f, 295 f 300, 318, 428, 430 f, BEAVER 55 161. 4) WIRZ 969 32. 5) BEAVER 55 301

killed all the people there except the girls" ¹); but if she were, Abere would be credited with the shaping of physiography, a typical feature of the stone-using heroes.

There are furthermore in Kiwai, Gogodara, and on the Turama River a certain number of myths in which the origin of the coconut, sago, taro, and yams is related in a different manner. But the beings and incidents of these stories reveal no association with the stone-using immigrants ²).

According to one Kiwai story, the rivers and channels of certain regions were made by a mythical crocodile into which a man had passed. The crocodile cut its way through the country ³); but nothing else of interest to us is recorded by this myth.

The connection of certain individuals with the sky occurs also in some Kiwai stories, except that the individuals have no association with the stone-using immigrants; thus, in a Kiwai myth a certain girl went up to heaven, and some men became stars ⁴) as in the Gogodara story mentioned earlier.

In the Purari Delta too, a few myths are recorded which can be regarded as an indication of the influence of the stone-using immigrants. Thus, the theme of the two antagonistic brothers and their quarrel over a woman occurs here again. The story runs as follows: In Aparu by the sea there dwelt two brothers, Mairau and Kuma. Mairau, the elder, already had five wives. Yet he, as well as Kuma, the younger, set his heart upon a certain woman, Iria. But Iria preferred Kuma and the two lived together, man and wife, though secretly, for fear of the elder brother; and Kuma had to cover the entrance of his house, where Iria was. Once when Kuma was absent, at a feast, Mairau discovered her in the house, broke down the barrier, and outraged the woman. Iria had painted her body with oil and red ochre, which Mairau now washed off her, so that the boards of the floor were stained with red. When Kuma came back and learned everything, he took his bows and arrows and fought with his brother. After that, Kuma went with his people to Koriki (or Ukiravi), and Mairau left with his people for a place not far from Iari, but since many people died here, some went to Motu-Motu, some to Uaripi, and some to Delena and other places, while Mairau was left with some of his people near Iari. Later he went to Iari ⁵). The breaking into the brother's house in the absence of the brother agrees completely with some of the other analogous stories, and the washing off of the red dye of the woman's body probably corresponds to the tattooing of the woman's genitals in the other stories ⁶).

The conception of a sky-people occurs again quite clearly in the Purari Delta. The myth of Aua Maku, which is somewhat mixed up with the

1) LANDTMAN 457 318. 2) See LANDTMAN 457 81, 86 f., 100 f., 313 f., 443, WIRZ 969 8 f. 3) BEAVER 55 301, LANDTMAN 457 318 f. 4) LANDTMAN 457 51, 312. 5) WILLIAMS 945. 6) Regarding another, though not typical story of the quarrel of two brothers, see the story of Biai and Daure; WILLIAMS 945.

myths of Iko, relates that Aua Maku and his brother set up in the village a big tree on which they climbed into the sky, where they remained. Aua Maku's daughter, Kauu, came down from the sky to earth, where she married a man of the earth. Later Aua Maku brought fire from the sky to the people of the earth, to whom it had hitherto been unknown; and he also taught them cannibalism¹). According to another version, it was the sky-woman who, when coming down to earth to marry a man, introduced fire, coconuts, sago, and jack-fruit, which were unknown before. Later she returned to the sky²).

Iri and Kai, the founders of the Ukiravi, according to some versions built the first kaie-munu monster, according to other versions they came from underground, from nowhere, or from the sky³). This latter detail shows to what extent the different conceptions have been overlaid in this region, and how confused the various versions have become. The sky origin therefore, or the stay in the sky, in some cases is perhaps only due to subsequent syncretism. It is possible also that the attributing to Aua Maku of the introduction of cannibalism is due to such a syncretism. The Ukiravi, in fact, maintain that their forbears were not originally cannibals, but copied the practice from the Kaimare, who were originally migrants from Urama, "thus suggesting the possibility that cannibalism came to the Purari Delta from the west", as HOLMES believes, adding "it probably did"⁴). In any case it follows that the conception of the sky-people is of some importance in this region.

From the fact that in the Elema dialect "kaia" means "sky", some writers have concluded that there is a certain association between the kaie-munu and the sky, but such a connection is not proven⁵).

The following story of the Purari Delta bears clearly the mark of a tradition based on historic facts: Before ever the two brothers Kuma and Mairau came up from Aparu, there were certain people dwelling in the neighbourhood of Iari. It is said that they came from the eastern side of the Purari River, where they formerly lived in a place where the sky came down close upon the hill-tops. The home of these emigrants from the east was said to be the river Auramu, apparently an eastern tributary of the Aivei. Now the people had no sago until the sky-men threw down some sago palms. But the ground-men, to whom sago palms were unfamiliar, felled them before they had matured. This led to a fight between the men of the ground and the people of the sky, until at last it was explained to the ground-men that the attack had been made in anger because the palms had been uselessly destroyed; after which they parted as friends. Some of the ground-men were contented, but some were still fearful of attacks

1) WILLIAMS 945 179. 2) HOLMES 395 179 f. 3) WILLIAMS 945 134, 136.
4) HOLMES 395 192; but on p. 287 HOLMES records that the Kaimare were migrants from the Koriki tribes. In this case his contention of the western origin of cannibalism would come to nothing. 5) WILLIAMS 945 124, 134-136, 139, NEVERMANN 611 52.

from the sky. So the former remained where they were, that is to say, in Kaura and Muro, and the latter migrated westward to the neighbourhood of Iari¹).

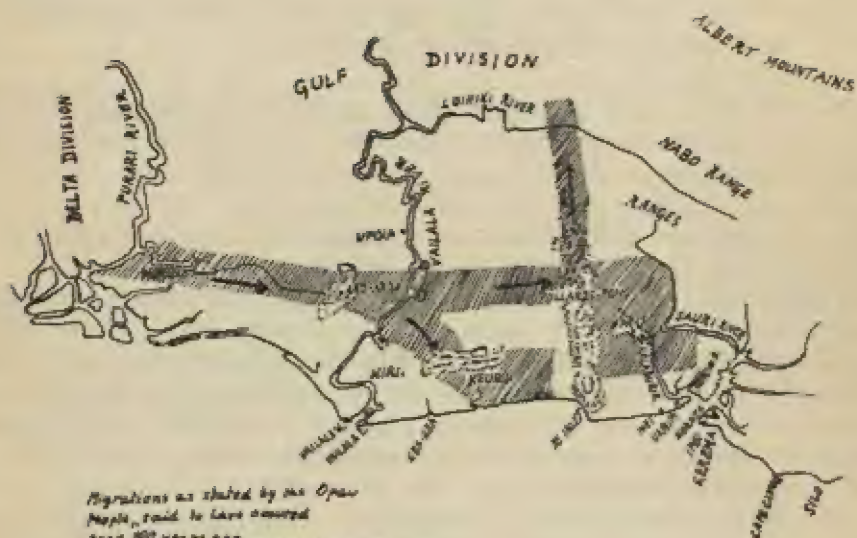
This myth, it will be seen, will serve as the prototype for the explanation of the history of this region; it shows that the sky-people who introduced food plants came into conflict with the aboriginal population in Muro (or Muru), which induced some of these aborigines to emigrate. Now, are we able to show who these sky-people who introduced food plants were? I think we can, for the following reasons: Further to the east, the Heran and Keuru tribes who inhabit the Lower Vailala River and extend even as far as the coast, are of very light skin²). This is of particular importance since, from the valuable account given by LAMBDEN, we learn that the Keuru, who are part of the Opau tribe farther to the east, immigrated to their present home from the Muru River on the Lower Purari in the west³), and Muru was thus a halting place of the light-skinned people. Now, it is just at this point that the clash between the sky-people and the aborigines took place. There is nothing to support the view that the aborigines driven out by the sky-people were light-skinned, and actually nothing is recorded of this. It is therefore most natural to suppose that these light-skinned people are identical with the other group mentioned in the myth, i.e. the sky-people. This means that we are confronted here with a light-skinned sky-people who introduced food plants and who, in fact, can be none other than the stone-using immigrants. In other words we are confronted here with the most southerly traces of the light-skinned megalithic people who, from the Purari and the inland regions west of it where their influence was so manifest, descended to the southern coast. We have shown that the migration of the people of the antagonistic brother Mairau of the Purari Delta passed through a place not far from Iari and then to Uaripi, Motumotu, Delena etc. i.e. in a west-easterly direction. Such a direction is similar to that of the migrations of the Opau tribe, although it cannot be proved that these two migrations are identical, since we do not know whether the Mairau migration went along the coast or somewhat more inland. But as we are of the opinion that this antagonistic brother was a representative of the stone-using immigrants, it is probable that the similar west-easterly migration of the light-skinned Opau was a migration of the stone-using immigrants too.

The emigration of the aboriginal "ground-men" is in fact only one of the many migrations from the interior in the direction of the coast, the best known being those of the Ipi tribes which we shall presently discuss.

LAMBDEN in his publication of 1922/23 furthermore furnishes the important information that the migration of the Opau from Muru must have taken place more than 100 years ago⁴). If, as we suppose, it be true that

1) WILLIAMS 945, 712 (1920/21) 62. 2) CHALMERS and GILL 134 118. 3) LAMBDEN in 712 (1922/23) 18 f. 4) LAMBDEN in 712 (1922/23) 18.

MAP III



Migrations as stated by the Opa
 People, said to have occurred
 over 100 years ago (sq.) W.J. Lamden

this Opau migration, or a certain wave of it, brought about the migration of the "ground-men" of the Purari Delta, it would be reasonable to infer that the migration of these "ground-men" must also have been of recent date. Now, there is no record telling of this in regard to the Purari Delta "ground-men", but we are informed that the Ipi tribes, which are in reality the "ground-men" of the region somewhat further to the east, did not reach the coast before 1800 or 1850. It is therefore clearly evident that the recent date of the primary migration corresponds completely to the recent date of the migration brought about by it. In other words: the light-skinned stone-using inland people by their recent movement to the south caused the migrations of the numerous aboriginal peoples, who reached the coast before or almost at the same time as their pursuers. The following investigation of the area east of the Purari will confirm this view.

The Ipi Tribes: The Ipi and the tribes constituting the Elema inhabiting the region from Orokolo to Cape Possession¹⁾ vary in skin colour from buff to dark brown. The Heran and Keuru have already been mentioned as being of very light skin. The hair is frizzy, but has a tendency to grow long, the nose is of arched Papuan type, the cephalic index is very low (77) and in stature the people attain about 6 feet. In the eastern Elema District, the Biaru and Jokea people are dark and tall, but their noses are straight, and in the inland villages adjacent to the Melanesian Mekeo, light-skinned individuals prevail, although some dark-coloured individuals are also found²⁾. It is not improbable that the light-skinned elements of these inland villages are the last westerly traces of those light-skinned stone-using immigrants who, as we have already shown, crossed New Guinea in an east-westerly direction. We shall not deal further with them here.

The Elema language is of the Papuan type, but at Cupola there are also several apparently Melanesian words in the language³⁾. The Jokea and Biaru originally had a language of their own, but by intermarriage with the Toaripi they later adopted the Toaripi language and their original language is known to-day to only a few of the men⁴⁾.

There are few regions in New Guinea whose history is as well known as that of the Elema tribes. The reason for this lies in the fact that their migrations, as has already been pointed out, are of very recent date and are therefore still quite fresh in the memory of the people.

At some distant period in the past, the ancestors of the present group of Ipi tribes, according to tradition, lived in the interior, near the east bank of the Purari, possibly somewhere near the lower altitudes of the Maikikiria range of mountains. From here a migration took place which crossed the

1) Regarding the various tribes constituting the Elema, see HOLMES 392 125 ff.
 2) HOLMES 395 42, EDELFELT 210 10, HADDON 325 273, 414, 329 91 f, CHALMERS 128 113.
 CHALMERS and GILL 134 113; 712 (1894) 18. 3) HADDON in HOLMES 395 5, MACGREGOR
 520 98, RAY 700 19, 703 65, 80, STRONG 853 180, 273, SELIGMAN 773 323. 4) 325 271 f.

Purari Delta to Urama, where they settled, but intercourse was maintained with the original home. From an early date there has been a tendency among these tribes to migrate in a southerly direction towards the coast. Each party of emigrants met with a check from tribes living in the Gulf hinterland, and had to change their course, from south to east or south-east. Starting from this home of their ancestors near the east bank of the Purari, the Morea-ipi migrated to the Purari Delta, keeping close to the east banks of the Purari on their southerly course. But from here they were driven to their present site by the Namau tribes and, according to HOLMES, they reached the coast in circa 1800. The Nahikai-a tribe on the Vailala River above the Ivori River also stated that they came from the Purari River. The Uaripi claim to have come over the Albert Range and down the Opau Valley, to Kerema. The easterly trend of the migrations of the Uaripi people can still be perceived from the Vailala River onwards. They state that after having come from the Vailala, they settled on the Kalaburi River, the present home of the Opau tribe, from where they later went to Kerema Bay. This is said to have happened about 100 years ago¹). The Milaripi of Freshwater Bay probably came along the northern slopes of the Albert Range. In their case too, the last phase of their west-easterly migration can still be perceived. They say that their grandfathers lived ten miles west of Cupola, on the hills. Quarrels with the Keuru people drove them down to the beach from where they travelled eastwards to Silo Creek, where they settled down. We have seen the Keuru to be a light-skinned people, and the fact that it was they who forced the "ground-men" Milaripi to migrate further east, is very conclusive. A long time ago the Toaripi or Motu-Motu lived on the headwaters of the Maipora River, which is apparently one of the stations on their migrations. From here they were driven to the coast by "mountain-men" and took refuge at the mouth of the Maipora River. This apparently annoyed the Karama people who lived immediately to the west, so the Toaripi had to go farther east and they settled at Moviavi, at the Tauri River, seven miles from the coast. From here they went to the coast which they reached about 1850. Another bush people, the Oikapu, who had formerly lived at Misa, situated about three days journey due north from the present Oikapu, also came down to the coast "more than three generations ago"²).

Discussing the probable reasons which have led to these migrations to the south, HOLMES expresses the opinion "that their quest for food was primary to the ultimate object of finding abiding places near the coast"³). Several objections must be raised to this: first, that we have seen the interior to be inhabited by an extremely dense population, using indeed very

1) BROWN, who records this in the 'Annual Reports' of 1923/24 20, says: 80 or 90 years ago. 2) HOLMES 395 33, 35 f, 392 125-133, 394 425, MURRAY 595 172 f, HADDON 323 9, 25 f, 245, 262, 325 271, 273, WIRZ 969 351 f, SELIGMAN 773 260 f, 712 (1921/22) 44, 46; (1923/24) 44, 20; (1925/26) p. 40 f. 3) 395 36, 299.

highly developed methods of agriculture and thus rendering the existence of such a numerous population quite possible. Therefore, the reasons for the emigration of the Ipi and closely related tribes from this district, can hardly have been economic. It has been seen that the final phase at least of the Milaripi migration was brought about by the light-skinned Keuru. The Toaripi also were driven from the headwaters of the Maipora River by the "mountain-men", who are obviously connected with the light-skinned people of the interior. We see that the migrations of the Ipi and related tribes are said to be of recent date, and we have already pointed out that, if these migrations have been brought about by the pressure of other migrants, the movements of these latter cannot be of early date either. Now, we know of no other culture in New Guinea or in Melanesia as a whole which has such a strong migratory tendency as the culture of the light-skinned stone-using immigrants. Furthermore, it has been seen that the migrations of the light-skinned Opau actually took place only just over 100 years ago which tallies with the tradition of Lake Kutubu stating that a stone-mortar was brought to this region by the great-great-grandfather of a native still living (1940) i.e., according to WILLIAMS, about 125 years ago. Moreover, the fact that the migrations of the Ipi and related tribes started from the Middle Purari, to which point the light-skinned people of the Upper Purari and its neighbouring districts also converged further supports the view that it was the pressure of these light-skinned people who brought about the migrations of the Ipi tribes. That the light-skinned megalithic people of the interior had actually a tendency to migrate southwards, has already been seen in the case of Ro, the stone-using sky-chief of the Tugi, who migrated from Tugi to the Ro District, i.e. in a south-easterly direction; and it will be recalled that the Sesa, Gorau, Ibu-Kairi, and Moreri people were all immigrants from the north. The same north-to-south tendency is directly confirmed in the region with which we are here concerned. The light-skinned Keuru, who were the direct cause of the Milaripi migrations, belong to the Haura tribe which had only recently come to the coast. Besides the fact that they have light skin, the Haura are the only tribe among the Elema who have an origin myth quite different from any of the other Elema tribes¹), which confirms HADDON's opinion that "the Haura are... of a different stock from the aboriginal population of the Elema hinterland". Now, HOLMES gives the following extremely important information regarding the Haura: "On the upper waters of the Vailala River, I have found representatives of the Haura tribe in the neighbourhood of the German boundary. (!) By occasional visits to tribes living on the east bank of this river, and a casual acquaintance with their movements, I observed for many years a marked tendency to migrate coastwards". With regard to the Haura migrations, HOLMES says even that "there is also an

1) According to this myth, a woman cohabited with crocodiles and thus bore the human ancestors of the tribe. HOLMES 395 160.

indication that what seems to have been done by the ancestors of the "Ipi" group of tribes, is still being done to-day by the Haura tribes"¹); but he did not recognize the causative connection between these two events.

Therefore, I am of the opinion that the events took place in this area in precisely the manner described by the Purari Delta myth, viz. that the sky-people—the introducers of food plants and bringers of culture—on their migrations from the interior to the south, came into contact with the aboriginal "ground-men". This contact in some cases was friendly, but in others hostilities broke out between the two peoples forcing the aborigines to migrate to the coast. As to the ultimate cause which led to the migrations of the stone-using immigrants from the interior to the coast, it is improbable that this can be attributed solely to their strong migratory tendencies. It has been frequently seen, and we shall come across further illustrations in the course of this study, that the geographical distribution or the paths trodden by the stone-using immigrants on their migrations overlap, to a certain extent, those of the Melanesians. Now, we know the Melanesians to be the most recent ethnic group in Melanesia, and it is therefore most logical to suppose that it was the pressure of these later coming Melanesians which urged the stone-using people to migrate.

As far as the migratory tendencies in the interior are concerned, HOLMES makes the further important remark that they went also "westward along the base of the main range, probably to the east of the Fly River"²). Now, the elements necessary to prove that such a migration took place are still lacking; HOLMES' opinion therefore is rather his personal view. But having regard to the facts we have mentioned, it is quite possible that the light-skinned inland people not only migrated in a south-easterly but also in a south-westerly direction, so that elements of the stone-using immigrants came to the eastern Papuan Gulf as well as to the Lower Fly, from which region they went along the coast in an easterly direction through Kiwai. On the other hand, it is very probable that the Lower Fly has some connections with the headwaters of the Fly and with the Tedi River; that is, with an area in which certain types of earth-work, the use of sacred plants, the racial and linguistic characteristics, point to the Middle Sepik. The tradition, according to which the culture hero Ibari of the Gogodara came to them from the north-west, might possibly further support this view, and the reasons which follow will show such a migration to have been even more probable. Here the trading relations can give us very significant indications of the actual migrations in this area. It has been seen that the trading relations of the "Mountain people" of the interior extended as far as south of the Kaban Range; the Awin language, and its similarity to the Middle Sepik language, makes it probable that it came to this region from the Sepik; certain objects found south of D'Albertis Junction pointed to relations with Lake Murray, and trading relations exist between Everill

1) HOLMES 392 132 f. 2) HOLMES 395 298.

Junction and Weridai on the Lower Fly, and between Weridai and Kiwai. We can thus follow the whole chain of trading relations from the interior to the coast. The culture too, of the Gogodara points to a connection with the Lake Murray District, and judging from the culture of the Trans-Fly region it is also probable that migrations of culture came from that area. This view, although not confirmed by traditions, must for the time being be considered as a possible one, particularly since up to the present there is nothing to support the view that there was a migration in a south-westerly direction from the Upper Kikori and its neighbouring districts to the east bank of the Fly.

Trading relations of the Elema extend to the west as far as Namau, and to the east they are carried on particularly with the Motu, but reach even as far as Keppel Point ¹⁾. The slight reminiscences of the conception of the devouring monster known by the Elema, point apparently to western influence ²⁾.

No stone-work has been recorded from the Elema District. At Perau on the western bank of the Annie River (Vailala River), CHALMERS saw "a large peculiarly shaped stone... named Ravi... considered very sacred" ³⁾; but nothing else is recorded regarding this stone, so that it is impossible to say whether it was megalithic or not. The exact position of Perau is not known to me, but it is possible that it lies on a spot which has been touched by the light-skinned Opau when, on their migration to the east, they crossed the Vailala River ⁴⁾. It would be interesting to clear up this point.

With regard to the use of sacred plants, we are only told that at a feast the Morea-ipi and Toaripi decorated themselves with leaves of croton (*digosa*) and *dracaena*, and that both these plants were found growing here. (According to CHALMERS and GILL they grew wild in Orokololo.) Warriors also were said to decorate themselves with croton when going forth to fight ⁵⁾.

Mythological evidence. Regarding the origin of the Orokololo, there exist a certain number of different stories, which all agree in stating that the first human being issued from the earth ⁶⁾. In one of these versions it is related that the first man who had come out of the earth far away inland, married a woman who had come down from heaven. They had two sons and a daughter, and the sons took their sister as wife, and from them sprang the Orokololo tribe ⁷⁾. I do not think that there is any reason to interpret the "ground-men" and the sky-people of this story in a way other than we have done hitherto.

1) KRIEGER 441 347, MURRAY 595 174, HADDON 325 273, 329 134, HOLMES 395 84, CHALMERS 126 152, 127 119 f, 178, 184, 129 331 f, EDELFELT 210 11 f, LINDY 498 107 f; 712 (1921/22) 46 etc. 2) HADDON 323 245, WIRZ 969 351; 712 (1926/27) 16. 3) CHALMERS 127 84. 4) See LAMBDEN's map in 712 (1922/23) 19. 5) HOLMES 395 166, 265, CHALMERS 126 160, CHALMERS and GILL 134 172, 198, 200, STONE 845 249. 6) KRIEGER 441 329 f, CHALMERS and GILL 134 136 f, SELIGMAN 773 260 f. 7) CHALMERS 127 54.

KRIEGER records that, according to an Orokolo myth, fire fell from the sky, by which mankind became aware of its existence¹). This agrees with the Purari Delta story.

Another myth recorded by KRIEGER relates that formerly babes were cut out of the womb of pregnant women, so that the women died. Once a woman asked her husband not to proceed in this way, and henceforth normal birth was known²). This theme has been found to occur with the Jabim, in the Bougainville Strait, Motuna, Kurtatchi, and in the Buka Passage, where it was more or less clearly associated with the stone-using immigrants. No other writer has mentioned this myth from the south coast of New Guinea, as far as I can see, and it must not be overlooked that KRIEGER is not a very reliable informant, particularly as far as the non-material culture is concerned.

Certain elements of the Iko myth are found to occur even with the Orokolo, but although the principal character is called Iko³), many of the details are considerably altered. It is certain that this myth is due to influence from the west.

Another myth of the Ipi tribes relates the story of Kivovia. His original home was said to have been in the Purari Delta, where he married a woman by whom he had a son called Levaosiaka. From the Delta he moved eastward to the Vailala where he finally settled, and was revered by the Vailala people as one of their great ancestors. He is the creator of sago palms, areca palms and nipa palms. It is said that he died at the mouth of the Alele River, which accounts for the large number of nipa palms growing there. Here, Kivovia established the world of the spirits of the dead. The Kivovia cult is not restricted to the Vailala and Orokolo, but extends as far east as Toaripi. Levaosiaka is claimed to be the creator of the dog⁴). In my view, it is possible that Kivovia is identical with Iko, reappearing here under another name and with a slightly changed character. This view would in some way be supported by the statement that Kivovia's original home was in the Purari Delta. On the other hand, it would also be possible that Kivovia is a culture hero of those light-skinned people which, coming from the interior reached the coast at the Purari Delta. A definite answer to this question will, however, only be possible when more about this being and the mythology of the inland tribes in general is known. It is furthermore quite conceivable that the myths of those light-skinned people coming from the interior to the south coast, are the same in their essential elements as those of the stone-using immigrants who migrated in a west-easterly direction, since, according to our reasoning, both these groups belong to the same body of the light-skinned stone-using immigrants of the interior.

A man, Raupu, and his wife Mori-oi, are said to have created the pig

1) 441 309 f. 2) KRIEGER 441 309 f. 3) See CHALMERS and GILL 134 137.
4) HOLMES 395 181 f, 393 430, CHALMERS 127 177, 711 V 191.

in Elema. They lived in the Elema village of Kaipi¹). But besides this nothing is recorded about these characters.

CHALMERS records that according to a Motu-Motu myth, Umeore brought coconuts and the yam from the east; his wife brought the banana²). This story is, however, not confirmed by any other writer, as far as I know. In fact, I am unaware of any culture migration from the east to the west other than the wanderings of the hero Keaura of the Motu. But we have no means of showing the identity of these two heroes, so this question must await further investigation.

According to the Elema, and particularly the Motu-Motu myth, Semese and his wife Kauue live in the sky. Semese has a younger brother. Semese's sons are Hiovaki and Miai, who also live in the sky. Hiovaki-Semese—in most cases CHALMERS speaks of Hiovaki-Semese as of one person only—descended from the sky and made the land and the sea. When he had finished, he lived at Moviaivi where he planted trees which cause elephantiasis. When Hiovaki came down from the sky, he cut down a coconut tree and from it made men and women. Then he built a men's house and a women's house. Hiovaki instructed the men to sleep in the dubus, and the women in small houses. Then he returned to heaven. The spirits of men who died in fighting ascend to the sky and dwell with Hiovaki³). From this it is evident that the conception of sky-people occurs here again, and that the sky-people are culture-bringers and creators, as in so many analogous cases in Melanesia. It is certainly not without significance that Semese, as well as Hiovaki, have each a brother, resembling thus the many pairs of brothers of the stone-using immigrants, but the myth relates no details regarding this. It is moreover probable that Semese's wife Kauue is identical with the daughter of the sky-hero Aua Maku of the Purari Delta, who bore the name Kauu⁴).

On the basis of the myths one thus gains an impression similar to that conveyed by the racial characteristics, viz. that the light-skinned stone-using immigrants, who from the interior descended in a southward direction, reached the coast at the Purari Delta and some other points farther to the east. Where they did not reach the coast, they must at least have followed so closely on the heels of the aborigines moving down to the south that a certain culture contact was inevitable. In addition, some influences must have radiated from the Purari Delta along the coast in an easterly direction, facilitating the establishment of those groups similar in race and culture who had settled down on the coast after having come from the interior.

It is evident from the data quoted that, in this area and farther west of it, scarcely any stone-work or none at all is found; and in those cases where

1) HOLMES 393 430. 2) CHALMERS 127 177. 3) CHALMERS 127 171, 173 f, 180, 129 329, CHALMERS and GILL 134 125, HOLMES 393 428, 395 182, KRIEGER 441 309.

4) Still another creator called Ualare is known, and is said to have created the world with the exception of certain food stuffs and animals. And another sky-spirit called Harai is also known. CHALMERS 127 80 f, HOLMES 393 430, 395 178.

stone-work is found its character is doubtful. This fact is in striking contrast to the frequent use of sacred plants and the occurrence of a certain number of mythological themes characteristic of the stone-using immigrants. To what extent this may be due to the character of the environment has already been pointed out. I am of the opinion nevertheless that the principal reason for the scarcity of megalithic stone-work lies in the fact, to which we have already drawn attention, that the stone-using immigrants who had only recently come from the interior, had inhabited this coast for a very short time; and, furthermore, these people lived in a state of migration which, in those regions where they were encountered, had not yet come to a halt. It is obvious that such a state of unrest must have been highly unfavourable to the erection of complicated stone-work, whereas it was no hindrance to the retaining and preservation of myths. And when at last these immigrants did settle down on the coast more or less definitely, they came into contact with European culture. Perhaps it was this contact which interrupted or deviated a possible evolution which, in normal circumstances, would have developed undisturbed.

At this point the question again arises regarding the origin of the Motu and their neighbours, or more exactly, regarding the elements of the stone-using immigrants which were found to exist among these tribes. We have already set forth the arguments which seem to be in favour of the view that the elements of the stone-using immigrants among the Motu came from the west. The fact that the light-skinned people of the eastern Papuan Gulf had descended from the interior in a south-easterly direction to the coast, would strengthen the view of a western origin of the megalithic elements among the Motu. Besides the traditions of a western origin of the Motu already quoted, the following record of CHALMERS is worth mentioning. Following up his account of the first man Ikauvape, the ancestor of the Orokelo, who came out of the earth far away inland, CHALMERS records: "The Motu tribe ancestor also came out of the earth at the same place, and he went away towards the rising sun, keeping inland until he reached Keaura, and then away to the hungry land; he has been over since the custodian of arm-shells, etc." ¹). In the Motu story of the antagonistic brothers, Taurama was found to be this custodian of the arm-shells; it is therefore probable that our present story is but another version of the story according to which the antagonistic brother came from the west. CHALMERS continues his record by saying: "The white man's ancestor came out of the earth also at the same place, and he travelled away to the west over the sea, and was never again seen until the present" ²). It has frequently been seen that the mention of Europeans was strongly suggestive of a light-skinned native population. In fact, none of the myths relating the migration of the people from the interior to the coast makes any mention of these people or a certain group of them being light-skinned, as far as

1) 127 54 f. 2) 127 55.

I know; however, we have seen that it was the racial characteristics which actually led to the conclusion that these light-skinned inland people migrating to the south could be regarded as the extension of the megalithic light-skinned people of the interior. Are we justified in seeing in this myth of the origin of the Europeans a recent modification of a tradition which attributed light skin to a native population? There is still another question; if the light-skinned elements of the Motu came from the interior, are these Motu elements identical with that group of light-skinned inland people which, according to our reasoning, have brought about the Ipi migrations? If this were so, the light-skinned elements of the Motu might likewise perhaps be of recent date; but nothing is known so far regarding this point.

In favour of the view that the stone-using immigrants came to Motu from the west, it might furthermore be advanced that the culture hero Kivovia of the Ipi tribes went from the Purari Delta to the Vailala River, i.e. in a west to east direction, and the people of Mairau, one of the antagonistic brothers of the Purari Delta, went to Uaripi, Motu-Motu, Delena and other places, that is, again a migration in a west-easterly direction. But too much credence should not be given to this story as proof of a western origin of the stone-using elements of the Motu; for the story of the antagonistic brothers is similar to that of Keaura and Taurama of the Motu, one version of which described in detail Keaura's east-westerly migration to the Papuan Gulf. It is easily conceivable that in Elema this Motu story of the antagonistic brothers may have come into contact with the analogous story of the Purari District, and that under the influence of the Purari story the east-westerly migration of the Motu story was converted into a west-easterly migration; this may have led to the confusion in Motu where, as we have seen, two contradictory traditions existed side by side. In these conditions the conclusion reached would be that the light-skinned stone-using elements of the Motu came probably from the interior behind the Motu coast, and that their migrations along the coast as far as the Papuan Gulf were but secondary movements. In the Papuan Gulf these stone-using immigrants came into contact with similar elements which, there too, had reached the coast after having descended from the interior and which migrated to the east along the coast, or which, via Kiwai, had spread eastwards along the coast.

We have here piled up supposition upon supposition without, however, being able to ascertain positively the trend of the migrations of the stone-using immigrants among the Motu. I leave it to further investigation to give a definite answer to this question. The only unquestionable fact resulting from all the data given is that the whole coast from Motu to the Papuan Gulf was touched by the stone-using immigrants on their migrations.

Farther to the east, it has been seen that the stone-using immigrant Samudulele of the Mailu was said to have come from Aroma, from where he migrated in a west-easterly direction to the Mailu. There this migration of

culture must have come into contact with the analogous Massim culture which itself diffused along the south coast of New Guinea in a east-westerly direction. We are unable to follow Samudulele's migration from a point any further west than Aroma; but light-skinned individuals have been found among the Kerepunu, Hood Bay and Hula people and the inland neighbours of the Motu, the Sinaugolo, Favele, Sogeri, etc., and the existence of typical prehistoric objects in this area, including that of the Motu, points to the presence here of the stone-using immigrants. It is therefore probable that the Samudulele migration is but the extension of these cultures to the east, although mythological proofs of this are still lacking.

We thus reach the conclusion that the migrations of the stone-using immigrants across the whole of New Guinea must have taken place in the following directions: From the Arapesh District on the northern coast they penetrated into the interior proceeding in a southerly direction through the Abelam region until they reached the Middle Sepik; from there they probably went along the Yuat River and then to Mt. Hagen. Nabilya River, Kagole River, and the "Grasslanders" area as far as Lake Kutubu. From the Tugi region they went along the Sambrigi River District, Mt. Murray, and through the area east of the Upper Kikori, descending in a south-easterly direction. Whether one wave branched off and migrated in a south-westerly direction to the east bank of the Fly and from there to the Gogodara and Kiwai, is doubtful. It is, however, probable that one group of the stone-using immigrants came to the east bank of the Fly from the Middle Sepik via the headwaters of the Fly and the Tedi River, and that from there they came to the Middle and Lower Fly. From this coastal region they radiated eastward as far as the eastern part of the Papuan Gulf. In the interior of New Guinea they spread eastward along the Wahgi River and its tributaries, and as far as the headwaters of the Purari. From there they descended to the south almost as far as the coast, and from the Lower Purari they branched off to the east in a migration which first passed within a certain distance of the coast in the inland, although at some places the coast was also touched. It cannot be proved that the elements of the stone-using immigrants which reached the Motu and their neighbouring tribes are in any way connected with the migrations with which we are here concerned, or that they are due to an extension of this migration to the east. From the knowledge we have gained up to the present, it is more probable that these Motuan elements can be attributed to a migration of the stone-using immigrants who, after a sojourn in the region between the Waria and Collinwood Bay, crossed this part of New Guinea on a large front. After reaching the coast, they migrated over a very wide area thus spreading the influence of the stone-using immigrants along this coast and coming into contact with similar people who from the Purari Delta migrated eastwards along the coast. The Samudulele migration to Mailu is but the extension to the east of that migration by which the whole of New Guinea

had been crossed. In Mailu, this culture must apparently have mingled with the analogous Massim culture. The fact that the culture hero Tau of Mailu is also called by the name of the analogous Massim hero Tamudulele, does not prove that Tau came from the Massim District in a westerly migration to New Guinea, on the contrary two analogous culture heroes meet here and the resemblance between them is so strongly felt by the people that the name of the one is conferred without any distinction on the other.

We shall now investigate the area west of the Fly River.

Trans-Fly District: In this area the Papuan type prevails in the race. The people of Parama Island are dark-skinned with arched noses. On the Binaturi River the skin is dark brown, but some "red" skin seems to occur, and the hair is frizzy. On the Pahoturi River the skin is very dark, and the hair is frizzy; on Strachan Island the skin is also very dark¹). Further to the west much lighter skin is found; thus, on the Morehead River the skin is almost a light yellow colour²). The Wiram, Aram, and Anima who live north of the Keraki on the Lower Fly, show a marked contrast to the other Trans-Fly people both physically and culturally, and are of the Lower Fly type³). The languages of this area are Papuan, and those of the Masingara, Dabu, and Buji show resemblances to the languages of the eastern Torres Islands, particularly of Mer⁴).

From the fact already mentioned, that kava and the conception of the devouring monster occur in this region, it follows that Melanesian influences have been at work here. The strong cultural connection with Kiwai is evident from the fact that the Sido myths are known here and that Sido extended his migrations to this region also; this connection is confirmed by the Kiwai tradition that the Gaera ceremony came from the west. In Mawatta, modelling of enemies' skulls was said to occur⁵). Almost all the animal totems of Kiwai occur in Mawatta, and the Moguru and Minnia ceremonies came from Kiwai also. In Mawatta, as well as in Kiwai, Adiri is the country of the dead⁶), and from the numerous traditions of the Mawatta, we know that more than 100 years ago the people came from Kiwai via Old Mawatta to their present dwelling places, Mawatta and Turituri, at the mouth of the Binaturi River⁷). This tradition is confirmed by the fact that Mabudauan village, whose inhabitants came originally from Mawatta and Turituri, was not founded by them before 1886⁸). The trading

1) FRANKS 266 216, STRACHAN 846 91, 95, BEAVER 55 55, 99, CHALMERS 130 110.
2) BEAVER 55 115, 127, THOMSON 888 167. 3) WILLIAMS 946 40, 42 f, 50. 4) RAY 700 19, 697 356, in CHALMERS 132 141 f, HADDON 711 I 249, 291, 327 152, CHALMERS 130 110, 133 116. 5) BEAVER 55 62, from D'ALBERTIS. 6) LANDTMAN 457 X, 380, LYONS 506 431; 711 I 210, 212. 7) BEAVER 55 61 f, 273, LANDTMAN 457 69, 101, 148, 436 f, 459 312, HADDON 711 IV 119, 323 151, BEARDMORE 51 459, D'ALBERTIS 15 II 150 f; 230, 380, LYONS 506 429 f, etc. 8) WIRZ 970 400; with regard to the other incidents recorded in the myths see the chapter dealing with the mythological evidence.

relations between Mawatta and the Torres Islands have already been mentioned in the discussion of the canoe trade from Dibiri and Kiwai. From further up the Fly, stone clubs were introduced to the Keraki by trade between them and the Wiram. The Wiram have relations with the area near Everill Junction. The Keraki have relations with the Weridai on the Lower Fly, the Gambadi, and on the southern coast, particularly with the Buji; in fact they are friends with all the tribes from the Bensbach River to the Wasi Kussa. The Bensbach River people themselves have relations with the west and the Marind anim, and the Tugeri make raids against the eastern tribes, the Keraki, Wasi Kussa, Strachan Island, etc. These intertribal relations have found very characteristic expression in the far-reaching trade in the so-called "Buji" arrows, which are to be found in many villages between the Wasi Kussa and Binaturi River as well as in Buji, although the principal makers of these arrows are the people of Tombukabora and Karagara. From here they are traded through the Keraki to Buji; and via the Keraki they come to Weridai¹).

No stone-work is reported from the Trans-Fly region; and, with the reservation already made, it might be mentioned that the Trans-Fly region is, in general, swampy and without stones, apart from the outcrops of granite at Mabudauan and Jerai (between the Wasi Kussa and the Morehead River). For this reason the Keraki import stone clubs from higher up the Fly, and for their ovens they use fragments of ant-heaps instead of stones. The rain stones used in magic are also imported²). But it will become evident that here too cultural reasons are decisive.

Parama Island, near Kiwai, whose inhabitants, according to the myths, came from the mainland, has a culture very similar to that of Mawatta, and its language is almost identical with that of Kiwai³). As on Kiwai Island "trenches ran in all directions to drain off the waters of the wet season"⁴). Farther west, as far as the Morehead River, nothing is recorded regarding such trenches.

Sacred Plants. On Parama Island several varieties of crotons and dracaena adorn the gardens; they are planted to be used in dances⁵).

Daru Island, which was one of the stations of the Mawatta-Turituri immigrants from Kiwai who drove away the Hiamu aborigines from Daru⁶), has also friendly relations with Mawatta, Turituri, Mabudauan, and Parama Island⁷). BEAVER records that "the whole place is ablaze

1) HADDON 329 39, 711 1 308, LANDTMAN 457 8, 30, 59, 146, 163, 420, BEAVER 55 75 f, 90, 108, D'ALBERTIS 15 11 185, BEARDMORE 51 464, MURRAY 595 195, STRACHAN 846 91 f, WILLIAMS 946 225 f, 263 f, 271-276, 414-416, 430, LYONS 510 145-147, map p. 145.

2) THOMSON 868 159, 162, STONE 845 5, MURRAY 595 64, BEAVER 55 9, 102, WILLIAMS 946 2, 19, 99, 266, 415 f, 942 392; 711 1 26, 237, 250. 3) BEAVER 55 55; in 711 1 238, SCHULLER 838 6. 4) GILL 286 223. 5) GILL 286 223. 6) See BEAVER 55 50,

LANDTMAN 457 329; 711 1 50, 354. 7) SCHULLER 836 6; the use of kava on Daru Island has already been mentioned.

with croton and hibiscus, the flower of Kiwai" ¹). In a Kiwai song sung during the Gaera ceremonies and suggesting a journey eastward from Adiri, the passage through the village Irue west of the Binaturi River is described, and it is said that this place was "full up sagida (croton bushes)"; or it is said of the spirit of the dead: "He look samera (croton) along bush belong Irago (village in Dudi) which he breaks to use it as dancing decoration" ²). In Mawatta, croton is one of the totem plants, and here bears the same name—"hamera"—as in Kiwai; another Mawatta word for croton—"esame"—likewise agrees with the Kiwai word; croton used for dancing decorations is, after use, always put into the ground, a custom which agrees with that of Kiwai; Beardmore, who records this, indicates that its purpose is "to grow for further use", whereas in Kiwai it was done to bring luck ³). In Masingara, where the Mawatta invaders settled down ⁴) "gay leaved bushes" are planted round the graves; taro used in a certain ceremonial way after the harvest is laid on croton leaves; croton is also planted for decorative purposes ⁵). After a death, the Keraki set up one or two sticks near the grave as a taboo sign for coconuts; besides these, croton or dracaena are planted; certain sorcerers use a fragment of croton leaf (kave) in sorcery; the great shells used in rain magic are frequently seen in the Keraki villages tied to croton bushes; the rain maker also uses croton leaves; those parts of the body of a slain enemy which are ceremonially eaten, must first be placed on a croton leaf; in the gardens crotons and dracaenas are planted, and dracaena leaves are put in the armlet by dancers; the bull-roarers shown to the initiates during the rites of initiation are decorated with croton leaves ⁶).

Prehistoric objects. I am not aware of any prehistoric finds in this region, but at Kuramangu, in the Keraki region, an object of some interest was found on a magic shrine. This was a flat pebble of irregular crescent shape, about 2½ inches long, and well polished. A hole had been drilled through the narrower horn of the crescent, and near the extremity of the opposite horn was a small notch. To the natives it represented a hawk with its beak and eye ⁷). It may be mentioned that the Sangara moiety of the Keraki is connected with the hawk. In the course of this study we have already frequently come across the association of the hawk with the stone-using immigrants, and a certain number of prehistoric stone-carved birds were found which we have attributed to the megalithic culture. The shape of the Keraki stone actually differs considerably from these stone-carved birds, and whether it can be classified with the other stone birds remains to be

1) BEAVER 55 52; quoted also by 711 I 20. 2) LANDTMAN 457 392 f. 3) LANDTMAN 457 XIII f, 188, BEARDMORE 51 463; 711 I 226; D'ALBERTIS 15 II 390 records the word "kersimae" for croton, and, according to RILEY 723 835, the Kunini east of the Binaturi River, called the croton "odo". 4) See BEAVER 55 61 f, LANDTMAN 457 69. 5) LANDTMAN 457 267, RILEY 720 104; 712 (1893/94) 55. 6) WILLIAMS 946 12, 192, 346-348, 369 f, 377, 381 f, 942 383, 387. 7) WILLIAMS 946 103-105, fig. 2, Pl. VI.

decided by further investigation. But it is perhaps not without significance that the natives connected this stone with the hawk.

Mythological evidence. There is a wide-spread belief in the Trans-Fly region that the original inhabitants lived in a tree and were in a miserable condition, eating poor food and without the knowledge of fire. They were liberated by a hero who generally came from the north and taught the people improved ways of living and gave them better food plants. There are also tales of various tribes having originated from maggots, who were instructed in the arts of life¹). The following versions of this myth are current in the different regions.

In Dudi, the Katatai, Parama, and Ubiri people all developed out of maggots at Wiraro. They had no fire, fed on certain larvae, and lived in a tree. Their dwelling was broken down by a man named Saisu who came from the Kiwai side, and taught them the use of fire and how to make gardens²). This, as far as I know, is the only version in which the culture hero is said to have come from Kiwai. This is perhaps due to the close proximity of Dudi to Kiwai. Only in the traditions of Sido's migrations is it mentioned that Sido also touched Dudi.

The Bina people, comprising Old Mawatta and its more recent colonies Mawatta and Turituri, have the following myth: The hero Bidirdu or Bidedu left his inland village Kuru at the source of the Binaturi River and journeyed towards the coast, reaching it at a place called Dudupatu opposite the island of Daru. Here the original people of Old Mawatta were living in the stem of a large creeper. Bidedu hearing voices in the creeper split the stem open and the Bina people came out with their leader Bija. To make the people come out, Bidedu made the Kareia rite over them, i.e. he sprinkled them with kava. Since the Bina people knew only inferior wild fruits and were ignorant of fire, Bidedu returned to Kuru, where he provided himself with all kinds of garden produce: coconuts, bananas, taro, sago, kava, tobacco, etc. and a fire stick. On his return he taught the Bina people how to grow these different plants and how to make fire, and also showed them how to build houses. The people then founded the village of Old Mawatta³). With regard to the period at which these events took place HADDON, after comparison of the various traditions, has reached the following conclusion: "The cultural movement associated with the name of Bidedu was quite distinct from and much earlier than the westerly raids from Kiwai which resulted in the flight of the Hiamu, and the yet more recent colonisation of Turituri and Mawatta from Kiwai"⁴). It has already been mentioned that the migration from Old Mawatta to Mawatta and Turituri took place more than 100 years ago. On the basis of the existing

1) HADDON in WILLIAMS 946 XXIX f. 2) LANDTMAN 458 88; 711 I 237.
3) LANDTMAN 458 85 ff, LYONS 506 428 f; 711 I 240 f. 4) 711 I 211, 241; regarding the driving out of the Hiamu, the aboriginal inhabitants of Daru Island see: HADDON 711 I 49, BEAVER 55 49 f, LANDTMAN 458 365-367, 408, 410.

evidence, I do not think that we can clearly show any genetic connection between the Bidedu migration, or any other analogous migration, and this recent Bina migration from Old Mawatta to Mawatta; but such a connection is not improbable, for the Bidedu migration is of relatively recent date also. LANDTMAN has in fact recorded that "several Mawatta families profess to know the names of all their ancestors up to Bidedu and Bija, as many as six or more generations" ¹). This information is all the more important, since it shows that we are confronted here with a cultural migration from the north descending to the coast, not much older than that of the light-skinned culture-bringers from the interior who followed on the heels of the Ipi tribes in the east. In order to judge whether these are really two analogous migrations, let us first investigate the evidence of the other tribes in this area.

According to a myth, the Kunini people, between the Binaturi and the Oriomo River, formerly lived inside a tree and were found by Bidedu, who induced them to come out. Bidedu gave them proper food, fire, and taught them many other things ²). According to another version, the Kunini people, who formerly lived further inland, had sprung from maggots. To them came Baduame, whose home was Kuru, and who was the father of Bidedu. After he had taught them agriculture, the Kunini people migrated to the coast ³). According to another tradition, the father of Baduame, i.e. the grandfather of Bidedu, named Javagi, was born at Kuru out of the semen of a kangaroo, which taught him the use of bows, arrows, fire, kava, etc. From Kuru at the source of the Binaturi he wandered down the river as far as the Kunini area. At Bugamo he met a woman and her girl who had arisen out of maggots and lived in a tree. They were nude and ignorant of agriculture. Javagi married the woman, and taught her and her girl how to make gardens and petticoats. After the birth of Baduame, Javagi and his wife returned to Kuru ⁴).

The Masingara, belonging to the aboriginal bush people ⁵) and among whom more recent influences are evident in the use of kava, the conception of the devouring monster, and the use of sacred plants, have also a similar myth. According to this myth, there lived a woman at Masingara named Ua-ogrerere. Once she speared a kangaroo; from the body maggots appeared which developed into children. The woman taught them to make bows and arrows, to marry each other, gave them taro, yams, sweet potatoes and kava and taught them to make gardens. One man she taught sodomy, so that they might grow into tall men, as hitherto the people had been very short. At last Ua-ogrerere went into the sky, climbing up a rope which was hanging from the sky ⁶). According to another version the woman was said to have gone to the country of the white man.

1) LANDTMAN 458 87 quoted also by HADDON 711 I 241. 2) LANDTMAN 458 88. LANDTMAN 458 85, RILEY 720 62, THOMSON 868 160. 3) LANDTMAN 458 82-85, HADDON 711 I 239-241; 712 (189293) 67. 4) 711 I 241, IV 117. 5) LANDTMAN 458 77-80, 110; 711 I 243 f.

The Yende tribe inhabiting the source of the Pahoturi strongly resembles the Keraki in their customs¹). They have no tradition of a culture-bringer coming from the north, as far as I can see, but their first ancestor who sprang from the ground journeyed to Karama in the far north-north-west, where he married, and from where he brought various plants and animals, so that here the culture was also introduced from the north or north-west. On the other hand, he fetched fire from the south coast. It is significant that the dead also go to Karama²).

Also the Keraki, Semariji, Gambadi, and Mikud have the same myth of liberating the people from a tree, the place of origin of the Keraki, Semariji, Setavi, and Mikud being Kuramangu, that of the Gambadi being Kwavaru. From the fact that among the Keraki and neighbouring tribes there are some associations of the two moieties Bangu and Sangara with different places of origin,—Bangu being associated with Kwavaru, and Sangara with Kuramangu—WILLIAMS has attempted to show that the two moieties are due to two different migrations; he thinks that the first migration is that of the Bangu coming from Kwavaru on the southern coast near the mouth of the Morehead River in the Gambadi region, and that the second is that of Sangara coming from Kuramangu in the region of the Keraki Proper. But on the other hand, WILLIAMS has himself emphatically stated that the present-day native does not think of the Bangu moiety as having alone originated at Kwavaru and the Sangara alone at Kuramangu. In the case of each site, mythology teaches that the whole of the people, Bangu, Sangara, and Maiawa (a small group so closely associated with Bangu, that it may be considered as a part of Bangu) were born or liberated there together. This problem is further complicated by the fact, also pointed out by WILLIAMS and which is for us of greater importance, that the Bangu among the Keraki Proper, name an entirely different place of origin; they say that their ancestor Iwa with his son Pala came from Nangusar, in the north-east near Weridai on the Lower Fly, bringing with them the stone clubs, sago palms, bull-roarers, etc. These two finally ascended to the sky. We can pass over the problem of the moiety associations; at any rate, Kwavaru is the place of origin of the Gambadi, and Kuramangu of the Keraki and Semariji³). The problem of priority is even more complicated still, since, as WILLIAMS has himself shown, the traditions are not unanimous on this point.

The originator who liberated the Gambadi people from a tree at Kwavaru, generally said to be Bangu, is named variously Tiv'r, Takweri, Aikumi, Kuramakor, etc. Tiv'r's wife appears under the names Tutu, Engu, Tangajirijiri, Thathu, etc. His son is Gwar or Gwam. The Kuramangu originator, said to be Sangara, is named Kambel, or Mainyu, Demban, Gainjan, etc. The Gambadi name of Tiv'r is used for the originator and sometimes for

1) AUSTEN in 712 (1919/20) 113; 711 I 248. 2) AUSTEN in 712 (1919/20) 113, 115; 711 I 248. 3) Regarding the routes of migration see WILLIAMS 946, map.

his son, and the Keraki name Demban is sometimes used for Kambel and sometimes for the son of Kambel. The name Mainyu is presumably identical with the name Manyu given by the Mikud people to the originator, who played a similar part in their mythology. According to the Gambadi myth, the originator Tiv'r came from Kwavaru. With his wife and child he travelled north and east, either to Tuari or Tamugogar, searching for a good place, because he found the ground too muddy to attempt to build. At Kwavaru there was a great banyan, within the roots of which there dwelt people. Tiv'r set fire to the tree, so that the majority of the people were burnt, but others floated off in the ascending smoke and were carried to the various parts of the Morehead District which they now inhabit.

In the Keraki stories, there is usually no account of Kambel's coming to Kuramangu; he simply was there as the first man. But a Rouku variant has it that he descended from the sky by means of the sak'r palm, commonly known as "black palm". In the usual version, however, his notice was first attracted to the palm by a mysterious sound inside it. He cut it down and out swarmed, first the Gambadi and Semariji and after them the more distant tribes of the Keraki, until finally there emerged the Keraki Proper.

The Mikud people have the same myth of the liberation of the people from the black palm.

The Keraki myth of Kambel continues as follows: Towards evening a mysterious white object appeared from amid the branches of the prostrate palm and flew upwards into the sky. Kambel made an ineffectual effort to seize it. This was Bangi the moon. In some versions Bangi, the moon, is referred to as the son of Kambel by his wife Eram, the sun. Much more frequently, however, Bangi is called the husband of Eram. But in his more human character, the son of Kambel by his human wife Yumar, is named Gufa. In another version it is said that Kambel, having felled the black palm, created from the sago-like pith inside it the sun, the moon and the stars. And sometimes Kambel himself in some vague manner is even identified with the moon, and called himself Bangi; at any rate, it is said that when Eram, the sun, his wife who as human being bears the name Yumar, went away to the west, Kambel ascended into the sky to follow her, which seems very like the behaviour of the moon. WILLIAMS himself has emphasized the "characteristic lack of unanimity concerning the origin of the heavenly bodies". At all events, we can distinguish the originator Kambel, his wife Yumar, and his son Gufa, all of them known by a variety of sacred names. All ascended into the sky, the first two as the moon, the last as the sun. But, as WILLIAMS has expressly stated, "there is no question, however, that apart from their identification with moon and sun, they are regarded as personalities". Yumar is said to have brought some food plants to the west, and Kambel brought kava to the west when he left Kuramangu for the west, two incidents which emphasize their human character. WILLIAMS has duly drawn attention to the fact that not only the myths speak of

several places of origin, but also the general culture of the Morehead District, proves that we are confronted here with a strongly mixed culture. We are therefore unable to ascertain which of the many versions here quoted is the most authentic; it is quite possible that various conceptions have overlaid one another here, and that the astral interpretations are later additions. In this connection it might be recalled that the analogous culture-bringers Ua-ogrerere of the Masingara, Iwa of the Keraki Proper, and also the heroes of the Wiram ascended finally to the sky, but were not associated in any way with the heavenly bodies.

All the garden products: taitu, yams, taro, sugar-cane, bananas, coconuts, sago etc., are attributed to Kambel, according to the Keraki myths. It is said that Kambel's dog killed a cassowary after a long pursuit, the course of which is still traceable in the topography of the Morehead River. After the dog had eaten the cassowary he vomitted and wherever the dog has done so the food plants mentioned sprang up, to the astonishment of even Kambel. Food plants were brought to the west by Yumar, the wife of Kambel, who journeyed to the west as far as the Morehead River, carrying a bag containing every kind of yam and taitu. Kambel followed his wife in the sky, and some said that he did this in the character of the moon when she was already the sun. Kambel is also responsible for the origin of animals. When the sak'r palm fell down, its fronds turned into all the animals; but according to other versions, Kambel found animals already in existence at Kuramangu. Kambel is said to have struck the pig on the head with a stick, so that pigs now have a narrow inferior forehead, but he is not said to have created the pig. According to the Keraki and Mikud myth, Kambel also procured fire by ordering a lizard to fetch it from Boigu Island in the south¹). Also the first bull-roarer was introduced by Kambel who obtained it from his wife's vagina, and the same story is narrated regarding Tiv'r, and his wife. Like Ua-ogrerere of Masingara, so Kambel started the practice of sodomy which he practised with his son Gufa who was a wretched and undersized little boy, with the result that he increased miraculously in growth. According to a Semariji informant, the introduction of sacred bamboo pipes, the dog, and tobacco were also ascribed to Kambel²).

1) This fetching of fire from the south, i.e. the direction opposite to that from which the culture heroes of this region generally came, is of some interest, inasmuch as it agrees with the Yende version; according to this, food plants and animals were brought from the far north-north-west, but fire was brought from the southern coast. This fact has already been pointed out by HADDON 711 I 251; according to a Mawatta story, fire was brought to Mawatta from Mabuiag. BEAVER 55 69; 711 V 17.

2) With regard to tobacco, WILLIAMS has himself pointed out that tobacco characteristically has no place in the Keraki myths, and was said to be an introduction from Wiram, so that for this reason, if for no other, we can pass over its mention in this myth. Moreover, the place which tobacco occupies in the cultures of New Guinea and Melanesia is such that its non-relation with the culture heroes here under consideration is out of the question. We can accordingly also disregard the statement of the Bina that Bidedu brought tobacco among other things.

According to some Semariji informants, Tiv'r introduced yams, taitu, sago, bananas, and the drum.

The theme of adultery recurs also in the Keraki myths but in a manner different from that related up to the present. It is said that Gufa, the son of Kambel and Yumar, had incestuous relations with his mother Yumar in the absence of Kambel. Kambel then kills his son, but he comes to life again. Then Kambel digs a pit which he covers and summons Gufa to sit down there. As the boy does so, he falls into the pit and there he is buried by his father. From this second death he does not rise again.

When, according to one Keraki story, Kambel first set foot on Kuramangu which was then an island, he hunted wallabies. One day, however, he shot a man. He took the body home, cooked and ate it, thinking it was a wallaby. The next morning when he became aware of his error, he was very repentant ¹).

Whatever may be the decision as to whether the dual system in this region goes back to two different migrations, and in spite of the ambiguity of some of the information, we must nevertheless emphasize that the culture-bringers Tiv'r and Kambel agree in their essential characteristics; it is therefore more probable that they are representatives of the same culture under different names, than that each is a representative of a separate culture. Moreover, this problem cannot be solved on the basis of the Keraki evidence and that of their neighbours alone; comparison must also be made with the many other analogous myths of the Trans-Fly area. Now, from these myths it is clearly evident that, as HADDON puts it "from the mouth of the Fly westwards there is a vague recollection of an indigenous population with an extremely backward culture who were taught more civilized ways of life and were instructed in new cults by bringers of higher culture who came from the north. These culture drifts are allocated to definite named persons" ²). There is in the myths we have quoted only one exception to this direction from the north; this is the myth of Tiv'r who came from the south and went to the north and east. Since, as we have seen, the myth of Tiv'r corresponds to that of Kambel and the other analogous culture bringers, this origin from the south is certainly striking. It is obvious that in some cases cultural influences have also taken place from the south, and the mythological origin of fire from the south is one instance of this ³). It is, however, most logical in my opinion, to suppose that in the Tiv'r myth there has been some amalgamation of two different traditions, one of a southern origin or a southern source of certain cultural elements, and the widely known

1) WILLIAMS 946 35, 37 f, 40, 57, 74-84, 102, 106, 182, 295-297, 299-304, 307-314, 332, 361, 385 f, 942 393-396, LYONS 509 72, HADDON 711 I 250, AUSTEN in 712 (1919 20) 8.
2) HADDON in WILLIAMS 946 30. 3) HADDON has pointed out that "there undoubtedly is some relation between certain elements of culture of the Keraki and their neighbours with those of the Torres Straits the exact nature of which is at present obscure". 711 I 251.

myth of the culture hero from the north who liberated the people out of a tree.

Once again, the most important question is: who are these culture bringers who came from the north and the north-east? If we compile all the information given in the analogous myths quoted here, taking it for granted that Saisu of Dudi, Bidedu of Bina, Kambel and the other mythological characters mentioned are representatives of the same culture, the following characteristics recalling the stone-using immigrants can be found in these myths: they are the introducers of food plants, among which is the coconut; some of them came from, or went into the sky; the dog of Kambel in its course creates the bed of the Morehead River and is thus a physiological shaper; it is perhaps permissible to see in the incest of Gufa with his mother, a reminiscence of the adultery with the brother's wife in the stories of the stone-using immigrants; and it is not improbable that the killing of Gufa in the pit is in some way reminiscent of the attempted killing in a hole of one of the various stone-using brothers; the fact that Kambel was repentant when he discovered that he had inadvertently eaten human flesh, seems to imply that he was not a cannibal, and this would likewise bring him in close relation with the stone-using immigrants, whom we have learned to be generally non-cannibalistic. Finally, it might be asked whether the fact that Ua-ogrerere of the Masingara went to the country of the white man, is not suggestive of a light-skinned people. Such an assumption, and the fact that the Bidedu migration of the Bina took place some six generations ago only, would accord with the migrations of the inland people which, in the east, brought about the migrations of the Ipi tribes. These migrations proceeded also from the north to the south, the people were likewise light of skin, and the migrations took place at about the same time as those with which we are here concerned. And these migrations in the east we have qualified as those of the stone-using immigrants. HADDON¹⁾ makes the following remark regarding the Keraki: "It is possible that some at least of the sacred stones of the Keraki were brought by their ancestors in their presumed migration from the far north or north-east". Apart from the stones used in rain magic, I know of no other "sacred stones" of the Keraki. WILLIAMS²⁾ has shown that almost all these stones are granite, but some are of basalt and sandstone, and it is therefore most natural to assume that they have been imported from Mabudauan or Jerai. That they were actually imported has already been mentioned. It is not necessary to repeat that these stones have nothing to do with megaliths, but belong to the Papuan culture. Therefore, HADDON's opinion could hardly be accepted if what he had in mind was these stones which were used in magic. But if he had at his disposal some other information regarding sacred stones of which I am unaware, his opinion would be of great im-

1) 711 I 251. 2) 942 382-385.

portance in determining whether these immigrants were actually our stone-using immigrants.

There is still another difficulty which must be mentioned here. It has been seen that several of the culture heroes were also credited with the introduction of the bull-roarer, sacred bamboo pipes, and sodomy, and Bidedu of the Bina, Ua-ogrerere of the Masingara, and Kambel of the Keraki also with that of kava; and kava was also known to Javagi of the Kunini. But although kava and some of the other elements are certainly Melanesian, they probably do not form part of the culture of the stone-using immigrants; this can only be a subsequent adaptation and does not correspond to the actual facts, an adaptation, of which the attribution of the introduction of tobacco to some of these culture heroes is another example. We shall now consider whether there is some other mythological evidence in favour of this assumed presence of the stone-using immigrants in this region¹).

According to the Keraki and Gambadi myths, Kambel found an eel in a hole under a palm. Its head was protruding and salt water was welling gently from its mouth. Kambel began to shoot arrows at the eel's head and when his arrow drove straight into the eel's head, the salt water gushed out in a deluge and Kambel and his dog fled before it. The country to the south was completely flooded and became the sea. Kambel made for his home in the north, and when he finally reached Tarekor or Arne, not far from Tabaram, he plucked some branches from the ground and swept back the water. The Wasi Kussa River, previously non-existent, remained to mark the course of Kambel's flight.

This shows that Kambel is here the creator of the sea and also a physiographical shaper. There is further proof to show that the theme of the creation of the sea is associated with the stone-using immigrants.

In connection with the flood there is another myth which, according to WILLIAMS, apparently does not belong to Kuramangu mythology but is vaguely known by the southern tribes, those of Kaunje and Tuj at least, which have been influenced by the Gambadi. In the Gambadi versions the flood rises, not from the mouth of an eel, but from a tree trunk (part of the banyan tree from which the people in Kwavaru mythology were liberated). A rumbling was heard inside it. Now two brothers, each known by a variety of names according to different versions, stood on either side observing it, preparatory to shoot it with arrows. The elder brother, Gwam, stood on the northern side, and entreated the younger, Muri, to come round and join him before they started shooting. But the younger refused to do so. They begin shooting arrows alternately. Muri, the younger, is a tall man of fine appearance; he has a long nose and a skin which is

1) A Buji story tells of a malignant spirit which induced a tree on which a woman is sitting to grow so high that she cannot come down, LANDTMAN 458 288, 456 ff; 711 I 249, but nothing else of any interest for us is recorded of this being or the other characters.

described sometimes as white, and sometimes as red. Gwam, the elder, on the other hand, has a black skin, a short, flattened nose, and "hard" hair. (Since the myth intends to emphasize by this description the physical contrast of the two brothers, it would be natural to conclude that Muri, in opposition to the "hard" hair of his brother, had smooth or wavy hair, although the myth does not expressly state this.) The younger brother scoffs at his elder brother, joking at the weakness of his arm and also of his bow, which is made of bamboo (like all Morehead bows) whereas Muri's is made of palm-wood. So they keep on shooting, Muri disregarding Gwam's entreaties to come round to the northern side. At last the tree trunk is pierced and the water gushes forth to become the sea. Gwam flees to the north and escapes; but Muri, crying farewell, is overwhelmed and disappears. Modern informants sometimes identify Muri, the younger, with the white man; "but I am convinced" says WILLIAMS "that this is an old story; its association with the white man is merely a twist or adaptation. The strange point is the bow of palm-wood, which is quite unknown in the Morehead District and does not appear, as far as I know, until we cross the Fly and find it among the Gogodara" ¹). Regarding the variety of names by which these brothers were known, WILLIAMS records that Gwam is also called Tiv'r (the name of the Gambadi originator) and it has already been mentioned that, according to some Gambadi versions, Gwam is the son of Tiv'r; Muri, who is also called Wuiavu "is identified with the Kafati or Kavat people. I do not know" says WILLIAMS "what this latter name means and have no other references to it. In one version the names Gwam and Muri are transposed". The name of this Kavat people with whom the light-skinned Muri is identified, is certainly reminiscent of the "Kabat" or "Kambat" and an analogous resemblance has already been seen in the word "kambak", signifying monoliths in the Sepik region. It has, however, been seen that similar stone-using immigrants appeared in Melanesia under such a variety of names that identity of names cannot even be expected, although New Guinea in particular has been found to show strong resemblances to the New Hebrides. Therefore until more is known regarding the megalithic culture of New Guinea, these resemblances must be taken for what they are worth, viz. as examples of a striking linguistic similarity ²).

From the physical characteristics which the myth ascribes to Muri, it is evident that he was of non-Papuan type; he has a long nose like one of the antagonistic brothers of the Iatmul and his descendants, and as some of the anthropomorphically carved monoliths and wooden posts, and he is said to be light-skinned. Here, in an area, in which the bamboo bow is usual, he is

1) WILLIAMS 946 305 f. 2) From the statement that "Gwam is also called Tiv'r" I do not think it would by any means be permissible to conclude that Tiv'r was black-skinned; first, because no other record reveals anything about this, and secondly, because of the interchangeability of names characteristic of all the Trans-Fly myths.

described being in possession of the bow made of palm-wood, i.e. what GRAEBNER has called the "Melanesian" bow. The creation of the sea was not only associated with beings belonging to the stone-using immigrants in general, but it has been seen that in many cases it was the two antagonistic brothers of the stone-using immigrants in particular who created the sea or ordered its creation. In their different skin colour, these two brothers correspond to the Wunekau brothers of the north coast who were likewise said to have introduced different weapons. That, in the present myth it is the light-skinned Muri who finally disappeared, gives further weight to the opinion that he was a stone-using immigrant.

It has already been mentioned that, according to RIVERS' opinion, the story of the two antagonistic brothers is due to a contact of two different races. The examples of this myth quoted so far, show that this presumed original *motif* has been lost in most parts of New Guinea and Melanesia in general, and that in the majority of the present myths of the antagonistic brothers it is hardly traceable at all. On the other hand, it can clearly be seen that this presumed *motif* is still more clearly apparent in some of the New Guinea myths, and the light-skinned Lavarata and the aboriginal Aura-na of Bentley Bay whose story resembles that of the two antagonistic brothers, are actually described as two different peoples. It is therefore perhaps not unreasonable to conclude that New Guinea lies nearer the area where these myths originated, which go back to a contact between the stone-using immigrants with an aboriginal population. But in view of the much wider extension of the mythological theme of the antagonistic brothers a wider comparative study would be necessary before a definite answer to this question could be given.

In another Keraki version, the origin of water or of the sea is related in the following way. During his exertions at chopping down the sak'r palm, Kambel became very thirsty. All he had to satisfy him was a wild tuber. Meanwhile his dog had discovered a spring. Kambel observed its wet muzzle, followed it, and was thus led to discover the first water. In other versions it is sea-water which the dog discovers and to which he leads his master ¹⁾.

A similar version is also known by the Wiram, the northern neighbours of the Keraki who locate their original home in Gukabi on the Bura Creek on the Lower Fly. This myth runs as follows: Sami and Gwavi, the first men, whose home is Gukabi, are engaged in felling an enormous tree in order to make a canoe. Hitherto there was no water at Gukabi; but, when the tree finally falls, the branches somehow make a number of holes which become filled with good water. Sami and Gwavi ignorant of this, become very thirsty with their hard work. In the meantime Sami's dog finds the water and drinks, returning to his master with a wet muzzle.

"I presume" says WILLIAMS "Sami and Gwavi eventually find the water, but the narrators of the myth made no mention of it". The dog runs to

1) WILLIAMS 946 304 f.

the north of Gukabi, far away in the bush on the left bank of the Fly. There he bit off the head of a man and ran for home, where he buried the head. The head turned into a coconut and in a very short time there stood on the spot a coconut palm. After the dog had drunk of the liquid and ate some of the nut, Sami realized that he had a new kind of food at his disposal. Sami then transformed Gwavi into a woman, and the sprouting coconuts he turned into human beings. Sami and Gwavi then embark in the canoe together with some of their people, and the canoe rises into the sky¹. That the tree from which the sea gushes is used as a canoe, agrees with the incident of the analogous Dobu and Taupota stories, the characters of which have been shown to be stone-using immigrants. It is furthermore characteristic that the origin of the coconut from a skull is associated with these Wiram heroes, and that finally they ascended to the sky, two facts, which considerably strengthen the view that they are actually stone-using immigrants.

From this it is evident that in the Trans-Fly region, Kambel and some of the analogous culture bringers of the neighbouring tribes must be considered as stone-using immigrants, to whom in this region some general Melanesian characteristics have been added. This signifies that in certain regions the ways of migration of the Melanesians, as well as those of the Austronesian stone-using immigrants, overlap. It is only to be expected that the mingling of culture was the more intense in such regions, since here two cultures much more closely related than was the culture of the stone-using immigrants and that of the Papuans, meet. From the numerous traditions it is evident that the stone-using immigrants came to the Trans-Fly region from the north. We can therefore consider these drifts as the continuation of the migrations of those stone-using immigrants who, descending from the Upper Fly to the south and south-east, had reached the east bank of the Middle Fly.

Tugeri: It has already been seen that contrary to the case of the more eastern regions, very light-coloured skin was found on the Morehead River. Similar racial characteristics are found farther west of the Morehead River. The Toro of the Bensbach River are tall, long-faced, with projecting cheekbones, and frizzy hair; the Tugeri (the Marind anim living near the English boundary) are very tall and besides dark and very dark-skinned individuals there are many of very light skin; the hair is frizzy and the noses are arched²).

Discussing the very light skin of the Tugeri, RAY³) concludes that "they can hardly be Papuans in any true sense of the term, as the natives of Mawatta and the Torres Straits Islands a few miles further east, are black,

1) WILLIAMS 946 386-389. 2) SELIGMAN 771 66, SELIGMAN and STRONG 778 228, THOMSON 868 168, HARDON 321 180, KRIEGER 441 370, MURRAY 595 84, PÖCH 667 391, 677 616, WOLLASTON 976 226, BEAVER 55 119. 3) 706 56.

frizzy-haired Papuans". PÖCH has drawn attention to the remarkable similarities between the inhabitants of the Sepik and the Tugeri, instancing mourning caps worn by the women, use of sago and betel, piercing of the alae nasi, head-hunting, and spiral patterns; and even the physical type is strikingly similar according to him¹). From this HADDON has drawn the conclusion "that the Tugeri migrated from the interior down the Strickland River, across the Fly, and down the Merauke and other rivers to the south coast"²). The use of kava among the Tugeri and their conception of the devouring monster have already been mentioned, and HADDON certainly had in mind the Melanesian migration which is responsible for the introduction of these elements. We have, however, seen that the presence of the stone-using immigrants on the Middle Sepik was manifest, and that this was one of the stations from which the stone-using immigrants, via the Upper Fly and Tedi River, migrated to the south. It is probable that some of the elements enumerated above came to the Tugeri through the intermediary of the Trans-Fly people since, according to the Keraki tradition, Kambel and his wife migrated to the west as far as the Morehead River, to where he also brought kava. We are therefore bound to modify the last phase of the migration as conceived by HADDON, since it is improbable that the immigrants descended the Merauke River; we must, on the contrary, conclude that after having crossed the Fly they descended in a southern direction to the Trans-Fly region from where they migrated to the west, reaching the area of the Marind anim in the Dutch part of New Guinea. It has already been elaborated that in the Trans-Fly region the migration of the Melanesian kava-people overlapped that of the stone-using immigrants, and the same must apply to this region farther west.

Besides the physical similarities with the Sepik people, PÖCH draws attention also to resemblances between the Tugeri and some of the Purari Delta people³). Now, we have recognized among these latter the most southern traces of the light-skinned stone-using immigrants of the interior. They must accordingly belong to the same group of peoples as those who came from the Sepik to the Tugeri by other routes. In these circumstances the similarity between the Tugeri and the Purari Delta people is not astonishing. The language of the Tugeri is Papuan⁴) and apart from the Tugeri raids which extend far to the east, the Tugeri have only occasional trading relations with the more eastern tribes⁵).

The Toro and Tugeri whose country is swampy, have draining ditches about one foot deep. The excavated earth is heaped up in rows and in these the taro is planted, so that WILLIAMS says, "the device is rather that of raising the earth above the water level than of draining". For the same

1) PÖCH 667 390 f, RECHE 707 480, HADDON 320 352. 2) HADDON 327 151. 3) PÖCH 667 391. 4) MEYER 558 74 from RAY. 5) See the sources quoted before and further: SCHMELTZ 824 154, MEYNEERS d'ESTREY 566 421 f, HADDON 321 177, 179, BEAVER 55 117, MURRAY 595 195, etc. etc.

purpose a ditch is made by the Tugeri around their houses; the excavated earth is used to elevate a little mound on which the houses are built¹).

Marind Anim: We have not a great deal of information regarding the racial characteristics of the Marind anim. The stature of the people diminishes from the coast to the interior. Among the Bade anim, who belong to the Marind, short as well as very tall individuals occur, and culturally too they stand midway between the coast Marind and the Yee anim of the interior. It is mainly they who drove away the aboriginal population²). The Yee anim of the interior who do not belong to the Marind are smaller than the coast people; the inhabitants of the Upper Bian, and the Kanum anim, who do not belong to the Marind, are also small. Among the small-bodied Bangu anim who inhabit the eastern boundary of the Marind area, WIRZ found a man with red hair and reddish skin, and he also mentions a man from the Kumbe River with very light skin and fair hair³). This information is very meager indeed for a region so extensive as that of the Marind, and certainly needs completing. The language of the Marind is Papuan⁴).

WIRZ has shown that, according to the myths, and the recurrence of village and river names, it is evident that the now uninhabited coastal area east of the Bensbach River as far as the Wasi Kussa (i.e. the country south of the Keraki) is considered by the Marind as the dwelling-place of their ancestors, dema. The earliest Majo ceremony took place on the mythical Majo Island which, as WIRZ has shown, is probably an island in the Fly estuary. This ceremony led to the origin of the coconut. Since the Majo cult is a coconut cult which is supposed to increase the fertility of the coconut palms, WIRZ is of opinion that the word "majo" actually means coconut. It was on Majo Island that their ancestors created all things which were gradually carried westward together with the Majo ceremony when the people migrated to the west. Three important cults of the Marind came from the east: the Majo, Rapa, and Sosom. On their migration to the west the Majo Marind settled first on the coast, afterwards penetrating inland up the rivers, and driving the aboriginal population back into the interior. WIRZ is of the opinion that the Majo Marind represent relatively recent immigrants, and that the Imo are the oldest immigrants. On the basis of HELDRING's calculations regarding the rising of the southern coast of New Guinea, WIRZ concludes that a certain number of Majo villages to-day in the interior were, 350 or 450 years ago, situated on the coast; it is evident from this that the coastal settlements of the Majo Marind as

1) SELIGMAN and STRONG 778 227, WILLIAMS 946 218 Note 1, SCHMELTZ 824 13, RAY 706 56, MEYERS D'ESTREY 566 424 speaks of "irrigation", but in view of the swampy character of the country this is certainly erroneous as is also evident from all the other sources of information. 2) WIRZ 964 67, 968 111 207. 3) WIRZ 964 70, 76, 145 f, 148, 268, Pl. 10, GEURTJENS 281 40, 44. 4) WIRZ 968 I 24, 32, EERDE 217 827.

well as their migrations must be of relatively recent date, as WIRZ has pointed out ¹⁾. The myths of the Marind anim confirm the impression gained by the study of the Keraki myths viz. that HADDON's opinion based on the occurrence of kava and the devouring monster among the Marind anim must be revised; in contradiction to his opinion that the introducers of these elements migrated from the interior down the Strickland River across the Fly, afterwards descending the Merauke River to the coast, the myths seem to convey that they reached the coast much further to the east, and from there migrated to the west along the coast penetrating into the interior later only. The eastern origin of the conception of the devouring monster which appears here in the Sosom cult follows from the fact that Sosom is believed to dwell in the east on the coast of the British territory from where he comes annually to the west; this is also borne out by the fact that he is unknown west of the Kumbe ²⁾. Kava belongs certainly to the Marind anim for it is widely known among them, whereas it is unknown to the Kanum anim, and the Mangat anim and Yee anim have only recently adopted it from the Marind anim ³⁾. Sodomy practised in the Sosom cult occurs likewise on the Bensbach River, between the Bensbach and Morehead Rivers on the Morehead River, the Keraki, Masingara, Daudi, etc. from which it is also evident that sodomy must have come from the east ⁴⁾. That sperma is used in the Majo cult and many kinds of magic ⁵⁾ as in the Muguru ceremonies of the Kiwai; that the country of the dead is located by the Marind on the eastern bank of the Fly ⁶⁾, that linguistic resemblance exists between the Marind language and that of Lake Murray on the Fly ⁷⁾, and finally, the fact that a western tendency was already clearly apparent in the migrations of the more eastern tribes all suggest an eastern origin of the Marind; thus the Semariji, Setavi and other neighbours of the Keraki considered Kuramangu as their home from where they migrated to the west; also Kambel of the Keraki migrated to the west as far as the Morehead River. Reciprocal trading relations exist between almost all the Marind tribes, and particularly between the coast and the interior and between the Marind and the Yee, Kanum, and Jaba anim. The Kondo and Kanum anim have relations with the Bensbach River in the east; in Moetin village, children kidnapped from the Fly were found, and stone clubs of the Upper Bian probably came from the Fly ⁸⁾.

The Marind practise modelling of enemies' skulls with clay, putting shells

1) WIRZ 964 60, 66 f, 74, 99, 138, 142, 968 I 21-23, 63, II 12, 25-27, 51, 59, 101, III 31, 150-156 200 211, NEVERMANN 610 33 GEURTJENS 281 61, EERDE 217 510-514. 2) WIRZ 964 140 f, 968 III 39, WILLIAMS 946 XXVI, NEVERMANN 610 19. 3) WIRZ 968 I 98, III 206, NEVERMANN 612 184. 4) HADDON 711 I 238, 250, WILLIAMS 946 XXVIII, 158, WIRZ 946 183 f. 5) WIRZ 964 243. 6) WIRZ 968 II 24, III 121 ff, 969 67. 7) RAY 697 357, HADDON 711 I 253, WIRZ 968 II 25, III 152. 8) WIRZ 964 71 f, 77, 118, 120, 126, 147, 168 f, 968 I 23, 110, 112, 123, III 193, GEURTJENS 281 38, 40, 131, 282 228, 237, 283 225 f, HELLWIG 351 214 f etc. etc.

into the eye sockets¹⁾, a custom which we have found to exist on the south coast as far east as the Purari Delta.

According to a few natives, phallus-like stones are to be found in the Kaja-kai District and at Sirapu on the Lower Maro, and are said to represent the dema changed into stone²⁾. It is to be regretted that WIRZ who records this gives no further details.

The Yee anim of the Upper Maro who do not belong to the Marind, have a myth according to which the yaval or yavar, the ancestors of the tribe, who correspond to the dema of the Marind, came to them in two big canoes by ascending the Maro River³⁾. Stones similar to those of the Marind play an even greater part with the Yee anim where they occur more frequently. As in the case of the Marind, these stones are considered as representing the yavar ancestors by whose name they are called. In almost every Yee anim village such a stone is found. They differ in shape and size, some being big round stones, others small stone rubble of the river; some stones "were of singular shape", and others were small round ground stones of star or pineapple shape with a perforation, i.e. former stone club heads. Since these were mostly crystalline stones which do not occur on the south coast, it is probable that they were brought from the Upper Digul and the Fly. They were to be found mostly in front of the houses or in the bush. Around these stones as well as around the former club heads, crotons are planted. Near Pirpa village in the Yee anim District in a small clearing of the bush WIRZ found a stone which was venerated by the people; it was oblong in shape, about 12 to 16 inches long and 8 inches broad with a shallow but wide groove on its side; it was of limonite which is found on the coast. WIRZ thinks that the groove indicates that it was a grinding stone for stone axes. The people regarded it as the canoe of a yavar. Around the stone crotons and dracaenas were planted.

WIRZ is of the opinion that the greater frequency of these yavar stones as compared to the analogous dema stones of the Marind anim, is due to the geographical position of the Yee anim who live nearer the Upper Digul and Fly River from where these stones are imported⁴⁾. No other stones are in fact found in the Marind anim District apart from the rare occurrence of sandstone, and for their ovens the people use fragments of ant heaps, or pieces of clay⁵⁾. The origin suggested by WIRZ can only apply, however, to the substance of the stones, and not to the custom itself. The fact that the stones were held to be the yavar, and that one of them was considered as the canoe of a yavar, leads to the conclusion that this custom must have come from the coast, since we have seen that the yavar with their canoes came to the Yee anim by ascending the Maro River.

1) PLATE 663 592. 2) WIRZ 968 II 142. 3) WIRZ 964 74 f, 93, 968 I 23, III 200, 206, 211, NEVERMANN 610 17, GEURTJENS 281 44, 83 f. 4) WIRZ 964 93-95, 968 II 14, 17, III 201, 208 f, 971 11 f. 5) GEURTJENS 281 30, 139, 282 247, WIRZ 964 30, NEVERMANN 610 37, 45, PÖCH 672 165.

Now, are the stones we have mentioned megaliths? If the dema stones of the Marind anim were actually phallus-like, this would favour an affirmative answer, and such a view is furthermore supported by the fact that the stones represent ancestors like many of the monoliths of the other parts of Melanesia; the planting of croton and dracaenas around these stones would also add weight to the opinion that they are actually megaliths. It is obvious that the stone clubheads and the other small stones had originally nothing to do with megaliths, but it might easily be imagined that these are makeshifts and substitutes in a region where, owing to the scarcity of stones, the inhabitants are obliged to import them from other districts. We must first see therefore, whether there is anything in the character of the dema or yavar themselves which allies them to the stone-using immigrants. Upon the answer to this question depends also that of the problem whether these stones are megaliths or not.

Draining ditches are again recorded from the Marind anim¹⁾.

Sacred Plants. According to a myth, croton shrubs sprang from the feathers which fell from the bird dema (*Xantomelia aurea*) when it was hunted by a man. It is said that this bird dema then flew into the country of the dead on the Fly River, where it is still living guarding the entrance of the afterworld²⁾. Besides their ritual use already mentioned, croton and dracaena are also used by the Marind anim in the numerous ceremonies in which the dema are impersonated, the performers being abundantly decorated with croton leaves which they must never be without; other performers carry croton branches in their hands, shaking them; the spot believed to be the abode of a dema is marked by the planting of croton bushes; around the place on which the impersonators of the dema appear, croton bushes are stuck into the ground and after the ceremonies they are transplanted on the shore, a custom which agrees with that found on Kiwai; before a dema player comes forward, the ground is beaten with croton branches; also along the way to the feasting ground croton branches are stuck into the earth. In the myth of the origin of fire, a dema is described shaking croton branches; in this myth it is further said that the wives of a dema planted croton in front of his house. This dema killed another dema whose bones are to-day still on the spot where this happened; around these bones croton bushes have grown "from the branches which the dema had brought with him." A second myth relates that a certain dema kills another by magic in which croton is used; croton leaves play an important part also in the present-day magic, and particularly in sorcery; a person made unconscious by sorcery and also in other cases of unconsciousness, the person is beaten with croton branches to enable him to recover. For a feast, pigs are killed and cut up upon a heap of croton leaves, and also other food destined for a feast is decorated with croton. In the ceremonies held for children, i.e. during the perforation of the ear lobes or the putting on of armlets, boys

1) PöCH 669 3, 672 164. 2) WIRZ 968 11 146 ff.

and girls sit on croton leaves; feast huts are decorated with croton leaves, croton leaves are inserted into the armlets during all feasts, and on no festive occasion must there be a lack of croton. At the initiation into the Majo cult, the novices receive a lime spatula decorated with croton leaves; in order to become a sorcerer, the candidates receive a certain medicine concocted from a number of different plants such as for instance the leaves of croton (*kundama*), *cordyline fruticosa* (*ngasi*), a certain variegated ornamental shrub called *pak*, etc. Croton is used also in rain magic, and a new canoe is decorated with croton branches; according to a myth, the spirits of the dead on their way to the afterworld are decorated with croton; those impersonating the deceased in a certain cult are decorated with croton, with which the corpses are also decorated. The posts on which captured heads are hung are decorated with croton. In the gardens croton, *dracaena*, or other ornamental shrubs are never lacking, but croton is the plant most frequently seen. Some of the villages are surrounded by multicoloured ornamental shrubs¹⁾.

The Kondo anim, who belong to the Marind anim from whom they separated on the migration of the Marind to the west²⁾, use croton leaves in sorcery as do the Marind, and in feasts they decorate sago leaves with croton³⁾. The Kanum anim, who belong to the aboriginal inhabitants of this region, speak a different language from the Marind, and their area formerly extended as far as the Kumbé River; but under the pressure of the Marind penetrating into the interior from the coast they withdrew to their present dwelling places. It is significant that they are ignorant of the use of *kava*⁴⁾. With regard to the use of sacred plants we are only told that the food for feasts is decorated with croton leaves, and that they decorate themselves with croton leaves⁵⁾.

Mythological evidence. We must now ask: who were the *dema* ancestors of the Majo Marind who migrated to the west, and whom WIRZ has shown to be the most recent immigrants in this region? Among the numerous myths recorded from the Marind anim the following are of interest to us. The origin of fire is related as follows: When a certain *dema* copulated with a certain woman but was unable to withdraw from her, Aramemb, another *dema*, came to his help separating the two, but by the separation fire was created. In some cases the fire was spread inland causing long barren valleys which later filled with water; these are the present rivers⁶⁾. Dawi, another *dema*, came from Majo with his big club and

1) WIRZ 964 49, 72, 110, 119-121, 127-130, 135 f, 142, 206, 217, 220, 229, 245, 277, 968 I 41, 71, II 17, 81 f, 99 f, III 22, 59 f, 65 f, 78, 80, 82, 121, 147, Pl. 12 fig. 1, IV 13, 15 f, 19, 25, 48-50, 52, 54, 57 f, SCHMELTZ 824 35, 45, NEVERMANN 610 25, 33 f, 49 f, GEURTJENS 282 64, 75, 83, 125, 156, 204, 224, 235, 237, 253, 259, 281 40, 8 566, 9 184.
2) WIRZ 964 164, 166 f, 968 II 26, HELLWIG 351 216. 3) WIRZ 964 189 f. 4) WIRZ 964 66 f, 99, 138 f, 141 f, 154, 968 I 23, 98, II 26, III 156. 5) WIRZ 964 147 f.
6) WIRZ 964 197, 968 II 80-83.

tried to extinguish the fire but did not succeed. With his club he knocked off the protruding parts of the coast thus creating numerous islands. All the islands were created in this manner, those beyond the Torassi, e.g. Saibai, Daru, Birmbu, as well as Habee, Komolom, Bumbel, etc. as well as the foreign places Surabaya, Macassar, and Ambon (the knowledge of the Marind does not extend farther). Habee Island was formerly situated at the mouth of the Fly River; from there it swam to the west a long time ago. On this island were the rattan, kangaroo, and pig demas; the latter bore the name Sapi. When the island stood still, rattan, kangaroo and pig went over to the mainland, where they had previously been unknown ¹⁾.

The myth relates that Aramemb rubbed his body with sperma instead of coconut oil which caused the different varieties of yams to grow from his head and his shoulders. He made big gardens of yams and thus yams originated. Finally Aramemb went to the Digul where he disappeared, henceforth nothing has been heard of him ²⁾. According to another myth, he was killed by a man, whose wife he seduced ³⁾. In the Jab anim District, Aramemb once killed a dema and ate him, but afterwards he resuscitated him from his bones ⁴⁾. When, according to another myth, the people had killed and eaten a boy, Aramemb brought him back to life again ⁵⁾. According to some versions the woman Harau with whom Aramemb had sexual intercourse and who gave birth to a kangaroo ⁶⁾, was Aramemb's sister ⁷⁾.

Another dema named Wokabu during his migration, also from east to west, built numerous huts in which he passed the night. These huts, which were later destroyed by a storm, became coral reefs. It is Wokabu's wife, the dema Sangon, who is credited with the introduction of sago, which was hitherto unknown. Since at first, however, the sago palm had no leaves, Wokabu stuck certain fish to the tree from which its leaves originated ⁸⁾. In order to prepare the sago, Wokabu called the woman Harau, the sister or wife of Aramemb. She came from the Upper Bian and was the first and only woman knowing how to prepare sago ⁹⁾. Wirz expresses the opinion that it is possible "that Wokabu as one of the first immigrants merely took possession of many sago trees and that he utilized them; for

1) Wirz 964 203 f, 968 II 87 f, GEURTJENS 281 90. 2) Wirz 968 II 94 ff.
 3) Wirz 968 IV 135 f. 4) Wirz 968 IV 135 f. 5) Wirz 968 II 149 f; Aramemb's weapons vary according to the different versions; some versions say he had a bow, and other that he had a spear and a sling. Wirz 968 IV 135 f. According to one myth, the bow is due to the bow dema, who lived in the Yee anim region. The Yee anim and other inland tribes received bows and arrows from him; Wirz 968 II 160 ff; nothing else is recorded regarding this bow dema. Regarding a bow dema see also Wirz 968 II 128. 6) Regarding these myths see Wirz 964 355, 968 II 89 ff; the woman has certain resemblances with the Dugan woman of the Bogadjim, Graged, etc. but is not described as a culture bringer. 7) Wirz 968 IV 135.
 8) Regarding the origin of the sago palm out of a crocodile see Wirz 968 II 122 f.
 9) Wirz 968 II 152 ff, 964 224 f.

sago palms are nowhere grown on the English part of the coast, the principal food there being yams and taro. This was perhaps also the case when the ancient Marind still dwelt in the eastern coastal district" 1). It must, however, be remarked that sago is used in the Trans-Fly District, and that its introduction is ascribed to some of the culture heroes of this region.

The myths mention also a coconut dema called Baringau, from whom coconuts were forthcoming in Imo, but nothing else is recorded of him. It is recorded that when Wokabu wanted to plant more sago palms, he asked Baringau for ground which Baringau refused, saying: "Go and plant in the interior, I remain on the coast". This, according to WIRZ, hints to the occurrence of coconut palms on the coast and sago in the interior 2). Another coconut dema is Meru who lived in the time of the earliest Majo ceremonies 3). A stork dema was able to change himself into a young man; as such he bore the name Wonatai; on his migration from Buti in the east to Komolom and Frederik Hendrik Island in the west, he introduced kava which was unknown to the people. At Domandeh he met Wokabu who lived there. Wokabu saw the many kava plants of Wonatai, but did not know what they were. One night he broke into the gardens of Wonatai from where he stole many kava plants. These he brought to the neighbouring Sangassé where he distributed kava; hence the people began to drink kava 4). In another myth it is said that when Aramemb came to Kumbe, "before entering the village he went into the Uati (*piper methisticum*) plantation of his friend who was of the same age" 5).

According to another myth, there lived a pig dema in Sanga near Siwasiv, who was able to change himself into a pig and into a man; his name was Nazr. To avenge wrong done to him by the people of the village, he changed them into pigs. Wokabu came from Imo loaded with many coconuts; he was astonished that the village had disappeared, and that instead of the inhabitants he saw pigs, of which he had known nothing before. Then Nazr appeared and they chewed betel nut together. Wokabu showed the coconuts to Nazr who had never seen coconuts before, for the coconut had only recently sprung from Baringau in Imo. Then Wokabu returned to Imo. One of the pigs, a big boar, ran to Habee; this was the pig dema Sapi. This dema is said to be still in Kumbe in the shape of a stone, but we are not given detailed description of this stone. According to other versions, it is said that he has been pulled up to the sky on a cord by the thunder dema Manimbu, that he is still up there and makes the thunder 6). After this, Nazr migrated to the west. On this migration he came to a village where he met an old woman called Mongoru, who wanted to devour him; he killed her with his club, ate the body, threw the intestines into a

1) WIRZ 968 II 31. 2) WIRZ 968 II 152 ff. 3) WIRZ 968 II 60 f. 4) WIRZ 968 II 109 ff, NEVERMANN 610 47 f. 5) WIRZ 968 II 94 ff. 6) Another thunder and lightning dema is De-hevaai, but WIRZ believes that this dema, Sapi, and Nazr are identical. 968 II 178 ff.

swamp and buried the head. The next morning he was astonished to find that various kinds of reed grasses and a variety of sugar-cane had sprang from the intestines, and that a certain variety of banana had sprung from the head. Then Nazr went to Kusa where he met the dema Mahu. The two built a canoe, and in it Nazr went to the Digul for head-hunting. Nazr taught Mahu how to prepare skulls; he modelled a face of moist clay and put small shells into the eye sockets sticking them in with wax. Then he painted the heads with red dye. Nazr remained on the Upper Kumbé¹⁾. According to another myth, Nazr married a female ghost called Sobra, who had fallen from the sky. The highly mixed character of the Marind culture is evident from the fact that, besides the afterworld beyond the Fly, there is another beyond the Digul²⁾, and another in the sky. Sobra had come to the earth north of the Bian source far in the interior. There she fastened a few kava plants to a cord which the spirits of the dead pulled up into the sky where so far kava had been unknown. According to this myth, Nazr is said to have learned head-hunting and the modelling of the skull from Sobra. She bore several children who became the flashes of lightening³⁾.

We must now discuss the two dema Geb and Sami. In WIRZ's opinion two Geb migrations must have taken place, one, the earlier, leading to the settlement on the Lower and Upper Bian and a more recent migration which, according to him, is identical with the migration of the Majo Marind⁴⁾. The myth records that a very long time ago, Geb sprang from a stone. An Uar (*Xenorynchus asiaticus*) is said to have chiseled a human face with its beak into the stone from which Geb then came forth. This happened on the mythical Majo Island in the Fly estuary. Geb was of tall stature quite black and horrible to look at; his body was as hard as stone and covered with sea pocks. He lived in an ant heap. Less is known of Sami. Sometimes it is said that he came from the interior of the country. Contrary to Geb, his body was dyed red. Sami is also the name of a certain kind of snake, but it is not recorded that Sami was a snake, although a snake dema called Sami is said to have lived near Domandeh⁵⁾. The following are the stations on Geb's migration: Kondo, Singeas, Domandeh, and Komolom. According to the myths, Geb and Sami worked and migrated together. According to one myth, a banana tree grew from Geb's neck; consequently Geb became the banana dema originating the banana. They cut the banana tree off and planted the banana. Later Geb climbed on the tendrils of a yam to the sky where he became the moon⁶⁾. In another myth it is said that when Geb was

1) WIRZ 968 II 170-178. 2) This latter according to WIRZ is the older conception. 3) WIRZ 968 II 189-191; regarding a female dema Sobra who came out of the ground in the Kondo District and who, by the bursting of bamboo in fire, caused the bodily openings which had hitherto been closed to open, see WIRZ 964 164-166, 968 II 184 ff. We are not told whether this woman Sobra is identical with the female skyghost which Nazr married. 4) WIRZ 968 III 154 f. 5) WIRZ 968 II 28 f. 6) WIRZ 968 II 66 f.

visited by the dog dema, the two wives of the dog dema chewed kava for the two men ¹⁾).

From the grave of a certain dema grew the areca palm, which was unknown before, whereupon betel chewing began ²⁾). In another myth it is recorded that when a cassowary dema was killed and his blood penetrated into the earth, the fruit tree *Eugenia domestica* sprang up ³⁾). But nothing else is recorded regarding these two dema. It must further be emphasized that there is a very large number of dema associated with animals, plants and objects, which, however, have no characteristics of interest to us.

Certain inconsistencies in the myths make an interpretation of them somewhat difficult. Thus Wokabu, whom WIRZ regards as the representative of an older migration, knows the coconut but not the pig, and Nazr, the pig dema, is ignorant of the coconut. If we were to take these statements as actually corresponding to the chronological facts they would certainly be in contradiction with our deductions according to which one and the same culture is responsible for the introduction of the pig as well as of food plants, including the coconut. I do not think, however, that we should lay too much stress on the details of the myths, as it is most likely that this is only a way which the myths have of crediting certain dema with the introduction of one thing only, and for the sake of the contrast describe another dema as being ignorant of this same thing. The introduction of the coconut by the immigrants from the east is borne out, according to WIRZ, by the fact that from the Prinzess-Marianne-Straat right along the south-west coast of New Guinea the coconut is very rare ⁴⁾).

Although these myths have very few characteristic features in comparison with the myths of most of the other parts of Melanesia, the following incidents are nevertheless reminiscent of the influence of the stone-using immigrants: Aramemb created yams; the fire brought about by him makes the rivers, and by this he is a physiographical shaper; according to one version, he had sexual intercourse with his sister and finally he disappeared. WIRZ himself has remarked upon the resemblances of Aramemb with Sido ⁵⁾). Dawi is the creator of islands, but nothing else is recorded of him; and it is worth mentioning that Wokabu's huts changed into reefs. A great number of dema are described as the creators of food plants as for instance Wokabu and his wife, Baringau, Meru, Geb, and Nazr who is at the same time the creator of pigs ⁶⁾). The connection with the sky occurs

1) WIRZ 968 I 43 ff, 129, II 144 ff. 2) WIRZ 968 II 48, 125 ff. 3) WIRZ 968 II 102-105. 4) WIRZ 968 III 151 f, 213. 5) 969 101, 970 427; in one Marind myth, male twins are mentioned who are joined together back to back, WIRZ 968 II 148 f, which is in some way reminiscent of the two foster mothers of Sido who were also joined together back to back. WIRZ has further pointed out that there is even another similarity with Sido in the Marind myths; as Sido was considered the first man to die, so also the dema Worju was held to be the first being who died. WIRZ 970 476, 968 III 127, II 184 ff; 711 I 378. 6) Some resemblances of Nazr to Irvake or Inivake of the Papuan Gulf have been pointed out by WIRZ 969 100 f.

with Sapi, Nazr, and Geb; the theme of adultery, although not typical, appears in connection with Aramemb. With regard to Geb and Sami it is obvious that they are identical with Gwawi and Sami of the Wiram whom we have already characterised as stone-using immigrants, although the stories about them differ from that about Geb and Sami; that Geb was black and Sami red (painted says the story) is certainly reminiscent of the brothers Gwam and Musi of the Keraki and Gambadi, and the Wunekau brothers of the north coast—pairs of brothers one of whom was black and the other white—whom we have seen to be representatives of the stone-using immigrants. We are not told that Geb and Sami were brothers, but it is significant that they migrated and worked together. It should be noted moreover that Geb sprang from a stone, as did Qat, and that this stone is even in some way reminiscent of an anthropomorphically carved monolith, and that Sami is not unlikely to have had the shape of a snake. It not only follows from the facts that Nazr introduced the pig, married a sky woman, and that the banana sprang from the skull he buried that he is likely to be a stone-using immigrant, but also from the statement of the myth that he introduced modelling of the skulls (of enemies), since we have attributed the introduction of this latter practice to the megalithic culture.

The following tradition of the Marind anim furthermore suggests an influence of the stone-using immigrants: A Majo ceremony was held in Majo near Jormakan. When the ceremonies were over, the Majo boys went with their mother to the west. The mother was a big snake (Bir), and bore the children in a basket. It went to the Jawim River and then to Kurkari (on the English boundary), to Majo near Siwasiv, to Kajakai near Sepadim and then to the Maro River. There a little girl that had come with them sprang out of the basket and changed into the fruit tree *Inocarpus edulis*. The snake with its children continued its migration to the west to Wuramur, where the traces of the snake can still be seen to-day in the form of a long ditch extending from east to west. From there the snake went to the left bank of the Kumbé River, and then northwards to Koandi. In Koandi the snake became pregnant and gave birth to a boy called Jawi. The snake with its children then went to Sangir and Badam. There a boy changed into a banana tree. Then they went on to Gavur, where the boys fished in the swamps. Two of the boys, however, wanted to keep all the fish for themselves; therefore the others threw glowing coals on them whereupon they climbed on trees and became the Pleiads. Later, the snake was killed by the people, and the dema Aramemb kidnapped the boy Jawi and brought him up. When Jawi was grown up he seduced Aramemb's wife, but when Aramemb discovered this he killed Jawi. After Jawi had been buried, a coconut palm grew out of his grave much to the astonishment of all, since the coconut had been hitherto unknown. So Jawi was the coconut dema ¹).

1) WIRZ 964 157, 968 II 65-74; GEURTJENS 282 235 records the origin of the coconut palm from a human head cut off from the body.

Here again we are confronted with a wandering culture-bringer snake which itself, or its children are described as the introducers of food trees including the coconut palm, as in the many analogous stories of the stone-using immigrants; and it is characteristic that here again the coconut springs from the head of the culture hero as in so many of these stories¹). Here too the snake is a physiographical shaper; the adultery of the snake's son with the wife of Aramemb and the ensuing killing of the seducer are certainly somewhat reminiscent of the adultery of the stone-using brothers, and it has already been mentioned that Aramemb himself was killed by the man whose wife he had seduced. The statement that two snake children became the Pleiades, and that Geb became the moon, must be taken for what it is worth, for we are unable to determine whether the astral character, or a more general association with the sky is of greater importance. The fact that the creation of the coconut and the banana is attributed in some instances to the dema Baringau, Meru, Nazr, and Geb, and in others to the children of the snake, shows among many other details of the myths which cannot now be discussed at greater length, how complex is the culture of the Marind anim²).

Besides the dema which show clear associations with the stone-using immigrants there are a great many others which are in no way reminiscent of them and one of these latter is credited with the introduction of kava. It is, however, remarkable that the demas using kava and those showing certain characteristics of the stone-using immigrants are described in the myths as being contemporaries. Moreover, both groups came from the Fly estuary in the east and migrated along the coast in a western direction, whence they penetrated into the interior of the country. This leads to the conclusion which we have already reached regarding the Trans-Fly region, viz. that the route followed by the stone-using immigrants on their migration overlaps that of the immigrants who introduced the use of kava and the conception of the devouring monster, not to mention such migrations as may have preceded these two latter migrations. Since both these groups were Austro-nesians, i.e. fundamentally related in character, such a very strong intermingling has taken place as to render it extremely difficult to separate the different elements of these cultures. Furthermore, the Marind is one of the last tribes in the south-west of New Guinea where any trace of the megalithic culture coming from the interior of the island is to be found. We can therefore hardly expect the vestiges of this culture to appear here with the same clearness as in the centres of this culture.

If, as WIRZ has supposed, the Majo coastal villages are not older than 350

1) The relation of this myth with that of the wandering snake of the Lake Sentani region has also been pointed out by WIRZ 969 344. 2) It is just as difficult to see any consistency in the social attachment of the various dema with the different social groups. See WIRZ 968 II 37, 73, 77; but since in the present study we are not concerned with problems of social organization this point may be disregarded.

or 450 years, we must conclude that the elements clearly associated with the stone-using immigrants are also accordingly recent. It has been seen that the analogous culture drift of Bidedu of the Bina people was said to have taken place six or more generations ago. This would mean that the migrations of the Majo Marind, or the stone-using elements among them, are a little older than the migrations of the megalithic immigrants of the Trans-Fly region, and the analogous migrations of the regions further east which actuated the migrations of the Ipi tribes. It must be borne in mind, however, that WIRZ's estimations are not based on genealogies, as are the other migrations mentioned, but on calculations regarding the rising of the south coast, a method not likely to lead to so definite a result as the calculation based on genealogies. If, on the other hand, the many possible errors of this latter method are kept in mind, one finally reaches the conclusion that the period when the stone-using immigrants came to the Marind corresponds approximately to the period when another group of these immigrants reached the south coast of the more eastern area of New Guinea.

Jaba Anim: These western neighbours of the Marind anim inhabit the area east of the Muli. Their skin varies from dark brown to a very dark colour, and the hair is woolly ¹⁾. They do not belong to the Marind; they speak a totally different language, but are culturally strongly influenced by the Marind from whom they have adopted the Majo cult, the dema performances, kava, etc. ²⁾.

It is apparently due to Marind influence that in the gardens of Bibikem croton shrubs and other ornamental shrubs are planted ³⁾.

Frederik Hendrik Island: The inhabitants of this island do not belong to the Marind and speak a different language. WIRZ has expressed the opinion that the people originally came from the mainland whence they fled because of the head-hunting raids of the Marind. From there, he thinks, they brought with them sago palms and coconut palms ⁴⁾. This is borne out by the fact that at some places where the sago palm does exist the use of the sago pith is not known, and that at other places the sago palm is rare or non-existent. The same applies to the coconut palm, which is also somewhat rare. The natives gave the information that formerly they were ignorant of the sago palm and that it had been introduced, although they were unable to say where the sago palms came from ⁵⁾. The inhabitants of Frederik Hendrik Island have also been strongly influenced by the Marind culture; from

1) FINSCH 242a 50. 2) NEVERMANN 610 58, 85 f, 93, GEURTJENS 281 130. The Marind have also influenced the culture of Komolom whose inhabitants, though not belonging to the Marind, have adopted the Majo cult, kava, ornaments, the social organization, etc. NEVERMANN 610 35, 154 f, 612 188 f; 10 825. 3) NEVERMANN 610 86. 4) WIRZ 964 366, 968 111 185. 5) NEVERMANN 610 61-63, 75 f, 79, 81 f, 102 f, 109, 113, 113 f, 138, 144 f, 148, WIRZ 968 111 186. I mention the non-existence of the sago palm in some regions, since it is likely to throw light upon the question

them they adopted the penis shell, kava, hairdressing, etc. ¹). Besides warlike relations, they have also trading relations with the Marind anim ²).

In the rainy season almost the whole of the interior of the island, with the exception of the somewhat more elevated coastal regions, is submerged. It is one of the particularities of this island that the natives by the heaping up of earth have made it possible to grow their plants, or to inhabit this inhospitable country. All the villages and gardens of the inland are built on artificial mounds; in the rainy season the excavated parts fill with water and surround these little islands like channels so that traffic between one island and another, or between the islands and the plantations, is by canoe. A village is formed of a number of such artificial islands ³).

The erection of artificial islands has been found in this study to be one of the most characteristic features of the culture of the stone-using immigrants; but in all the cases mentioned these islands were erected in the sea, and the reasons for their erection were quite different. The erection of these artificial islands in the swampy region of Frederik Hendrik Island is in fact quite an isolated case in Melanesia. With regard to the construction of draining ditches, we have already formulated the question whether the primary purpose was not the heaping up of dry earth mounds, a practice, which by excavating the earth necessarily led to the construction of draining ditches. This was actually the case in the swampy area of the Toro and Tugeri, and there house mounds were also erected with the earth excavated around the houses, thus agreeing with the practice of Frederik Hendrik Island, the only difference being that on Frederik Hendrik Island these mounds are considerably larger. In view of the cultural influence of the Marind anim, it is therefore highly probable that these artificial mounds have their origin in the use of "draining ditches" among the Marind and their neighbours. We are thus confronted here with one of the last elements of the megalithic culture, which through the Marind, has reached as far west as Frederik Hendrik Island and which, owing to the particular conditions of the country has developed here in a manner so far unknown. This enables us to explain by culture contact a custom which so far seemed quite isolated in Melanesia.

It is probably due to Marind influence that croton bushes and other ornamental shrubs are never lacking in the gardens ⁴).

South-west Coast of New Guinea: As far as we know no vestige whatsoever of the stone-using immigrants has been found either on the south-west coast

as to whether the immigrating Marind anim found the sago palm already existing in their present habitat, as Wirz has suggested, or whether they or certain elements among them introduced this palm.

1) WIRZ 968 111 185, NEVERMANN 610 58-61, 70, 73, 75, 102, 105, 136, 147, 154, 612 188 f, GEURTJENS 281 106. 2) NEVERMANN 610 77 f, 111, 138 f, 152, WIRZ 964 364 f, GEURTJENS 281 108, 131. 3) WIRZ 964 365 f, 968 111 186, GEURTJENS 281 106, NEVERMANN 610 63, 66, 75, 103, 108, 132 f, 136-138, 144. 4) NEVERMANN 610 59, 75.

of New Guinea or in the interior of this area north and north-west of the Digul. Where light skin occurs it is encountered mostly among the pygmoid inland people and is a particular characteristic of that race, which reveals no traces, however, of recent racial influences ¹⁾).

Kei and Aru Islands: We need not proceed to a thorough investigation of megaliths of these two islands, for although the racial basis of these islands is Papuan, the racial and cultural influences from Indonesia have been so strong and of so long a duration that both islands may be considered as belonging to Indonesia. There are moreover very intensive trading relations with Indonesian islands, and Mohammedan, Chinese, Japanese, and European influences are to be strongly felt.

The stone-work as well as the myths point clearly to Indonesia. This is in fact the reason why PERRY in his work "The Megalithic Culture of Indonesia", has dealt also with these two islands. On Aru, the villages are surrounded by stone walls, and on Kei Island the villages, single houses, and gardens are surrounded by stone walls; graves are fenced in by stone walls, heaps of stones are used as offering places, and stone circles and other types of stone-work occur ²⁾).

RIBBE records an Aru Island myth of light-skinned immigrants whose ship changed into stone, and still exists to-day in the shape of a reef vaguely resembling a ship ³⁾. I refrain from analysing this myth.

F. W. K. MÜLLER, PLEYTE, and KERN have given information regarding a Kei Island myth of certain sky-people and its parallels in Indonesia and beyond it ⁴⁾.

I mention these facts, since a certain influence has spread from these islands to the opposite mainland of New Guinea a region we cannot disregard if our present study is to be complete.

Dutch New Guinea: On Adi Island not far from Kei Island, in Adi Bay and Namatote Island off the mainland, the Indonesian influence is similar to that on Kei Island. On both islands, as well as on the Karufa River which flows into Adi Bay, light and dark-skinned individuals occur, but the hair in all three regions is frizzy ⁵⁾. Trading relations with Ceram traders have not

1) Regarding light skin on the Oewimerah River, Upper Digul, Goliath pygmies, Utumbuwe River, Upper Northwest River, Utakwa River, Tapiro, Pesechem, Mimika River, etc. etc. see: GEURTJENS 281 20, 79, BROEK 96 822, 97 32, NODRUYS 619 2, BRUIJN 109 84, WOLLASTON 976 198, 977 261, 269 f, RAWLING 692 109 f, 181, 252 f, 693 245; 10 837, 1009 f etc. etc. 2) PERRY 651 12, 21, 29, 46 f, 51, 58, RIBBE 716 170 f, MERTON 556 166, 174, 177, 186, 189, 190, 194, Pl. p. 187, 190, D'ALBERTIS 15 I 164, ROUX 748 36, PLEYTE 664 572 f, 825, BURGER 113 62, 67, etc. etc. 3) RIBBE 716 173 f. 4) MÜLLER 590 533-535, PLEYTE 664 562-565, KERN 426 501 f. 5) FINSC 242a 74, 90, v. d. AA 11 318, CHRISTMANN 156 II 24.

only strongly modified the material culture and language, but have led to the introduction of the Mohammedan religion ¹⁾).

On Adi Island, Namatote Island and on the Karufa River stone graves similar to those of the Kei Islands were found, due apparently either to the influence of Kei or to direct influence from Indonesia. On Adi Island and on the Karufa River after the decomposition of the corpse the bones are exhumed and deposited on a spot which is surrounded by stones ²⁾. On Namatote Island in front of a house there was a heap of coral stones such as is found on Kei Island ³⁾.

The whole of the adjacent coast of North-west New Guinea, including large parts of the MacCluer Gulf, is visited by Malayan and other traders and has therefore been strongly influenced in race, material culture, language and religion. This very well known fact is confirmed by many sources of information which need not here be given in detail ⁴⁾.

An old stone wall found in Skroe village on the coast of the Kapauer District is probably due to such Indonesian influence ⁵⁾; this applies likewise to the "grave of a chief" of Sekar in the MacCluer Gulf, pictured by KRIEGER ⁶⁾: a picture on which a few heaped up stones can be discerned, although not very clearly; and it applies also to a stone wall in Sisir village in Sekar Bay ⁷⁾.

In the Bituni District at the eastern end of the MacCluer Gulf which is also visited by traders of Ceram, and where the religion is Mohammedan ⁸⁾, a smooth stone wall was found 20 to 30 feet high and several hundred feet long ⁹⁾.

We by no means suggest that this and similar stone-work in this region must necessarily be megalithic. It is possible that much more recent influences have been at work here and there, and Mohammedan and even European influence cannot always be entirely excluded. The data given here regarding stone-work must therefore be accepted with this reserve. The knowledge of this region is, however, too scanty to determine in each case to what stage of culture the different types of stone-work belong.

The coast adjoining the MacCluer Gulf in a north-westerly direction as far as the Kanoki people, has no direct contact with Indonesian traders as far as I can see, but has trading relations with Onin ¹⁰⁾. There is, in fact, not the slightest trace of stone-work or any other elements characteristic of the megalithic culture to be found on this extensive coast.

1) FINSCH 242a 74-76, 90 f, CHRISTMANN 156 II 26, KRIEGER 441 392, VERSTEEG 903 160, v. d. AA 11 316, 319 f, HILLE 360 297, 299. 2) FINSCH 242a 92, CHRISTMANN 156 II 26. 3) WICHMANN 938 74. 4) MACLAY 569 165, 172, 177, FINSCH 242a 80, 82 f, KRIEGER 441 431, 433, 436 f, v. d. AA 11 154, 159 f, 167, 176, 179 f, 183, 299 ff, 305 f, etc. etc., VERSTEEG 903 160 f, DISSEL 198 791, 793-795, 197 617, 620 f, 629, 633, 639 ff, 196 994, 1002, 1020, 199 505, 508, D'ALBERTIS 15 I 22, 26, 212, HILLE 360 253 f, 262, 297, 451, 411, 415, 527 EARL 207 57 etc. etc. 5) HILLE 360 521. 6) 441 fig. 31, p. 396. 7) STRAUCH 847 18 Pl. I fig. 4, v. d. AA 11 47. 8) EERDE 218 948, v. d. AA 11 41. 9) TIJSMANN 857 213. 10) HILLE 360 498, 504, 621 f, 625 f, 629; I 191.

Not until we reach Sorong Island in the Gallewo Straits between Salawatti and the most western part of New Guinea do we find tombs surrounded by stones ¹⁾. But Sorong Island again, apart from some Papuans from the mainland,—mostly slaves—is inhabited by people of Mafor Island, Biak, Salawatti and Tidor, the Malayan being by far the prevailing element; the religion is Mohammedan ²⁾, as in the other neighbouring regions. It is therefore obvious that this stone-work is due to Indonesian influence.

On the more eastern part of the north coast of New Guinea there is not the slightest trace of the stone-using immigrants; neither is there any stone-work, nor any prehistoric remains nor even the use of sacred plants. Only in Siari on the west coast of Geelvink Bay has a grave been found by V. D. SANDE ³⁾, surrounded by red stones. Now, the population of Siari has probably originated from a mingling of Wendesi and Numfor people ⁴⁾. The close relationship both as regards trade and history existing between Numfor and Indonesia will be discussed presently. Wendesi has trading relations with Bintuni, which is visited by traders of Ceram ⁵⁾; the stone-work mentioned is therefore certainly due to this Indonesian influence, and, it might further be added, is quite an isolated case in this region and not confirmed by any other writer.

The close relation in culture and trade of the northern islands of Geelvink Bay to the western part of New Guinea which has itself strongly been influenced from Indonesia, is evident from the fact that many of the people of West New Guinea and the islands off the coast came originally from Biak and Numfor. Biak people have settled on Gaman Island, Waigeoe Island, Serori east of Cape Sorong, Sorong Island, Asbakin village, Sasi Palé, Lorong village on Dom Island, Warsai village, Amberbaken, and many islands and places in Geelvink Bay. Immigrants from Numfor have settled on Salawatti, Sorong Island, Man Island, Lasi Island, Amberbaken, etc. ⁶⁾. These migrations of the Numfor and Biak people have led to the wide-spread diffusion of the Numfor language as far as Sorong Island in the west and on many islands in Geelvink Bay ⁷⁾. The inhabitants of Numfor have not only trading relations with West New Guinea, but extend their trading expeditions even as far as Ternate, Tidor, Ceram, Celebes, etc. and in the east they reach even as far as the mouth of the Sepik. On the other hand, they are visited by traders of Ternate, Macassar, Tidor, Ceram etc.; the arrival of Indonesian canoes driven out of their course is frequent, and the Numfor people are actually under the suzerainty

1) D'ALBERTIS 15 I 41. 2) D'ALBERTIS 15 I 41 f, 204, 214 f, V. D. AA 11 55, HILLE 360 461. 3) 753 273. 4) V. D. SANDE 753 48. 5) V. D. AA 11 40. 6) HILLE 360 239 f, 455, 460 f, 463, 468, 476, 482, V. D. AA 11 58, 222, D'ALBERTIS 15 I 41, 214, RUYSS 751 321, WIRZ 971 37 f, 973 509, 974 185, CLERCQ 158 587, 589, 591, 601, ROSENBERG 742 45, FINSCH 242a 128, HASSELT 345 134, MEYER 560 535, 963; 1 190, 7 142 ff. 7) The Numfor language is Melanesian but strongly mixed with Papuan elements. FRIEDERICI 271 72, 270 72, SCHMIDT 832 246 f, 834a, 158 etc.

of the sultan of Tidore, as are also wide regions of the mainland¹). These relations have also brought about a racial intermingling; thus the skin of the Numfor people varies from yellowish to black brown colour and the hair from wavy to frizzy²).

On Numfor, the graves of unimportant people are covered with a heap of stones, whereas people of consequence are buried in a different manner³). It is not certain whether this custom has been brought about by an influence of the megalithic culture, since only the graves of unimportant people are treated in this way; but should this actually be the case, it would be another instance of Indonesian influence. Furthermore, among the korwars used at many places in Geelvink Bay there are a certain number which are made of stone⁴). SPEISER has attributed the korwar style in general to the megalithic culture⁵).

Mythological evidence. In Geelvink Bay there are a few mythological themes which we have learned to be associated with the stone-using immigrants.

According to a myth known on Numfor, Biak, and in Doreh, an old man called Mangundi, lived on Biak a long time ago. (Mangundi or Manseren Mangundi is also known by the following names: Mansaarnakri, Mansariji, Manamakrie, or Manamakerie.) He was engaged in the preparation of his palm wine when he noticed that his implements and his wine were repeatedly stolen. He hid in order to watch, and discovered that the thief was the morning star. He caught it and set it free, but not before the morning star gave him a magic fruit which had the power to make a woman pregnant. Mangundi threw this fruit on a woman who became pregnant and bore a son whose name was Konori. Since, however, the relatives of the woman did not approve of this marriage, Mangundi wished to leave the island. He drew a canoe in the sand which soon became a real canoe, but since the people did not want him and his family to leave the island, they pulled the canoe up into the forest in the interior of the island. But when Mangundi and his family got into the canoe it began to move of its own accord, and Mangundi went over the sea to Numfor Island. Since at that time Numfor was only very small, Mangundi stamped his foot on the ground, and the island became as large as it is to-day. As the island was uninhabited, he put four pieces of wood into the ground which changed into the four villages of the island; he also gave fire to the people. Mangundi suffered from skin disease, so he made a fire and got into it, causing his scurvy skin to fall off and change into copper dishes, pearls, arm and leg rings of gold and silver etc. He himself appeared again as a

1) FRIDERICI 272 255, WIRZ 969 42, 971 41 ff, 49, 63, 973 509, 517, 974 185, HASSELT 345 135, 169 f, 171, 199 f, 347 502, ROSENBERG 742 24, v. D. AA 11 73, 194, 197, 222, etc.

2) WIRZ 974 190, CLERQ 158 618, HASSELT 345 135, MEYER 557 306, CHRISTMANN 156 11 31, FINSCH 242a 95, 372. 3) CLERQ 158 629. 4) NUOFFER 620 3 f, v. D. SANDE 753 302 f. 5) 804.

beautiful young man. He promised the people he had created that they should earn their living without working, advising them to sell these articles for food. But when these articles were exhausted they took to the canoes which Mangundi had made and went to a neighbouring island in order to purchase food. This made Mangundi very angry, so that he left the people punishing them by obliging them to work as they had done before. There is no unanimity as to where Mangundi went. According to some informants, nothing more was heard of him; according to others, he went to Biak or to Mesra, an island north of Numfor. It is generally believed that Mangundi did not die, but that with his son Konori he would return, and that a happy age would then begin. In other versions Mangundi has been confused with Konori, and the Konori myth has obviously been mixed up with biblical themes¹). When therefore it is said that Konori finally returned to his father in the sky which made his mother so sad that she changed into stone, we cannot be sure whether this ascension to the sky is not due to christian influence²).

Another Numfor myth relates the story of a man who married a sky-woman who had come down to earth to bathe; he hides her wings so that she cannot return to the sky. He has children by this woman. Later on she finds her wings and flies back to the sky, but the man follows her on the back of a bird. He remains some time in the sky, but afterwards with his wife he returns to his sons on Tidor Island. The sons become later the Radjas of Djilolo, Batjan, Ternate and Tidor. The man himself is described by the myth as a Dutchman, who had escaped from a sunken Dutch ship³).

According to another Numfor myth, the coconut sprang from the skull of a woman regarding whom, however, no other characteristics are mentioned⁴).

It appears clearly from these data that here again a certain number of mythological themes occur which we have seen to be associated with the stone-using immigrants. Mangundi is a culture bringer who also created the people. By his stamping on the island he is a physiographical shaper; the theme of the canoe which moves from the interior to the sea of its own accord, occurs here again as in the tales of some of the stone-using immigrants; Mangundi finally departed, whereupon the conditions of the people deteriorated. Whether the association with the sky in the Mangundi-Konori myth is indigenous or due to missionary influence is difficult to determine, nor is this question elucidated by the fact that the association with the sky reappears at the mouth of the Mamberamo River in a myth of an analogous character. The myth of the sky-woman is, however, indigenous, and does in fact, agree completely with the other analogous

1) FINSCH 242a 128-131, KRIEGER 441 409 f, CHRISTMANN 156 II 37. 2) HASSELT 345 176-178, 346 p. 99, 103-106, 347 576 ff, FINSCH 242a 108, 110-112, CHRISTMANN 156 II 10, KRIEGER 441 406, 408-411, WIRZ 971 37 f, 50, 973 509. 3) HASSELT 347 534-536, 539-544. 4) HASSELT 347 493 f.

stories already quoted. Now, PERRY, in his work dealing with the megaliths of Indonesia has shown that this conception of the sky in Indonesia belongs definitely to the culture of the stone-using immigrants. Myths of sky-women who come down to earth occur frequently in Indonesia, where they agree in all details with the analogous Melanesian myths, and it is interesting to note that in the Indonesian myths also the sky-women are often described as light-skinned¹). In this connection it is significant in my opinion that, according to the Numfor myth, the man who married this sky-woman was a Dutchman. The fact that this man, after his return from the sky, came to Tidore, that his sons became the Radjahs of Djilolo, Batjan, Ternate and Tidore, and that the skin of Mangundi changed into copper dishes, pearls, and rings of gold and silver, i.e. articles which are imported from Indonesia, makes it probable that these myths came to Numfor from Indonesia. It is outside the scope of this study to show to what extent the mythology of the Melanesian stone-using immigrants agrees with that of the megalithic people of Indonesia, but that such resemblance does exist is an indication of the extremely important fact that the megalithic culture of both these areas is basically identical.

MOSZKOWSKI has shown that most of the inhabitants of the Mamberamo estuary came to this region not earlier than a few decades ago from the islands of Geelvink Bay and particularly from the Schouten and the Padeido Islands. The racial characteristics are therefore similar to the characteristics of these islands. The people are small, rather light skinned and often have wavy hair; they have mingled with Malayan elements. Their language is Austronesian²). Besides trading relations with the interior, they trade also with Kurudu Island and with other islands of Geelvink Bay³).

No material traces of the stone-using immigrants are found in this region. But Mangossi, who seems to be in the sky, is believed to be the

1) It might also be mentioned that in the Polynesian story of the "Slayer that-came-from-Heaven" of Lakemba (Lau Group, Fiji), Tonga, etc., whose father was the king of the sky and whose mother was a woman of Tonga, this hero ascended to the sky; when he descended to the earth again "two men, great and tall, whose faces were white, came with him", FISON 251 49-57. 2) MOSZKOWSKI 585 276, 586 317-320. The small stature, the wavy hair and the convex upper lip, which MOSZKOWSKI asserts he has found in numerous cases, are considered by him as pre-Malayan characteristics and related to the Wedda; this race, according to him, mingled with Melanesian elements and Malayan elements of more recent appearance. This theory has been rejected by NEUHAUSS (in his criticism of MOSZKOWSKI 586 343) in whose opinion the individuals with wavy hair are by no means a particular group of Papuans, but are a mingling with Malayan elements. We have no hesitation in accepting NEUHAUSS' view not only in regard to the Mamberamo estuary, but we have also explained the occurrence of light skin and wavy hair in the adjacent regions in the same manner). 3) MOSZKOWSKI 586 330, 336 f, 587 952, KRIEGER 441 432, v. D. AA II 103.

creator of the world¹). He obviously corresponds to Mangundi of Geelvink Bay. Manseren Korori is also known, and is said to have given the people their laws and founded the men's house. As the people did not obey his commands, however, he disappeared, but it is believed that he will return at some future time²). Moszkowski calls this myth "an old culture-hero story known by all the coastal tribes" and it is certain that this story is identical with the Mangundi-Konori story of Geelvink Bay. It is significant that Moszkowski was taken by the natives to be Manseren Korori *redivivus*, which may possibly indicate that this hero was believed to be of light skin.

With regard to the origin of sago, a myth relates the story of a man who is said to have come from the sources of the sea; in every village he asked for a wife; if the people gave him a woman he taught them how to make sago, but where they did not give him one they remained ignorant of sago making. After some time he disappeared again to the place from which he had come³). Here again we are confronted with an immigrant introducer of food plants who came from over the sea, and the theme of the final departure also appears again. This myth shows moreover particular resemblance to the Sido myths of the south coast and the adjacent regions, since Sido also introduced his food plants only to the places where he received a woman⁴).

On the long coast east of the Mamberamo estuary as far as west of Lake Sentani, no material or any other traces of the stone-using immigrants have been discovered as far as I can see, although Malayan traders have reached even farther east.

It has been seen that on the very long south-west coast, and on the west coast of New Guinea, stone-work is of very rare occurrence and apparently no great importance is attached to it. In all cases it can be traced back to Indonesian influences. On the north coast of New Guinea hardly any trace of stone-work was found, but the myths of Numfor and the Mamberamo estuary point to Indonesia. If these meagre vestiges of the stone-using immigrants are compared with the prolific traces of the megalithic culture in many regions of New Guinea and the rest of Melanesia, one is bound to conclude that the megalithic culture cannot have come to Melanesia from Indonesia. The few traces of this culture in the western part of New Guinea must therefore be the last dispersed traces of the megalithic culture of Indonesia, partly brought over by trading relations. This view is confirmed particularly by the complete absence of any traces of the megalithic culture east of the Mamberamo estuary and, furthermore, by the very important fact that the first reappearance of the megalithic culture on Lake

1) Moszkowski 587 949 f; he is also considered as the husband of the moon. Moszkowski 586 324 f, 587 951. 2) Moszkowski 586 327. 3) Moszkowski 586 331. 4) Regarding a myth of the Koassa Kamboi of interest in this connection see Moszkowski 586 340 f, 344.

Sentani further to the east can, as we have seen, only be explained by an eastern origin. As to the myths of Numfor and Biak, WIRZ has pointed out that "many are of foreign origin and have been adopted from Ternate, the natives of Halmahera and other islands" ¹).

Our view that the few elements of the megalithic culture in the western part of New Guinea are due to the final phase in the spread of Indonesian influence, is also confirmed by the general culture and linguistic conditions. VAN EERDE has shown that the most eastern limit of Indonesian influences on the south coast of New Guinea is between Etna Bay and the Utaqua River, and RAY also has shown that west of Etna Bay the languages contain words and constructions similar to those in the Indonesian languages. The culture of the whole of the west coast and the western part of the north coast has been influenced by Indonesia. As the most eastern limit of this Indonesian influence on the north coast, VAN EERDE indicates the Mamberamo estuary. Now, these are precisely the extreme points to which traces of the megalithic culture were seen to have spread. The general culture consequently confirms our view that the few traces of the megalithic culture found in this region are due to Indonesian influence ²). It is remarkable that VROKLAGE's conclusions regarding the migration of the megalithic culture in this part of New Guinea agree completely with our own, although our conclusions have been reached by deductions differing completely from those of VROKLAGE. According to VROKLAGE, the megalithic culture first settled on the coast somewhere near the centre of the Mandated Territory, from where it migrated to the west as far as Lake Sentani, but did not go beyond this point. He bases this conclusion on the occurrence on Lake Sentani of the working of stone, of marriage by purchase, the presence of saddle-shaped roofs which exist as far as that region but not further west, the use of spiral patterns, the fact that here migrations took place generally from east to west, the fact that ancestor images of the Sentani region resemble those of the Sepik, from which WIRZ had already concluded that a migration had taken place from the Sepik to Lake Sentani ³). In the western part of the north coast, the influence of the megalithic culture can be recognized, according to VROKLAGE, from the occurrence of spiral patterns found from the "Bird's Head" and Geelvink Bay as far as Jamna Island, and ancestor images found as far as the Mamberamo, two elements which, according to him, are due to Indonesian influence. From this he draws the conclusion, which agrees with our own, that on the north coast of Dutch New Guinea we are confronted by two culture drifts, the one coming from the east and the other from Indonesia in the west. VROKLAGE is of the opinion that they met on the Mamberamo; but we do not agree with him in this detail, for, as we have seen, on the long coast be-

1) WIRZ 971 49; FABRITIUS has even seen in Mangundi "een Hindoe-priester uit Kalinga of Koromandel." V. D. AA 11 44 Note 2. 2) See: VAN EERDE 217 824-829, Map p. 830, LAMSTER 456 Map A. 3) VROKLAGE 917 110, 918 108.

tween the mouth of the Mamberamo and Humboldt Bay, no vestiges of the megalithic culture are to be found; there was therefore no contact at all between these two cultures coming from different directions, but a great hiatus was formed between the Mamberamo and Lake Sentani. VROKLAGE is quite right in considering both these drifts as part of the same seafaring culture, which came to New Guinea from two different directions. Starting from South-east Asia, one drift passed through the southern islands of Indonesia afterwards touching the western part of New Guinea. Another branch of the same culture went over the Philippines and Micronesia to the Sepik, from where it spread westwards. In the Moluccas, only traces of the last incursions of this culture can be recognized so that the intensive megalithic culture of New Guinea could by no means be explained by the extension of this megalithic culture from Indonesia to New Guinea. DEACON was therefore mistaken in supposing that the megalithic culture came to New Guinea from the Moluccas (Ceram)¹). On the other hand, also according to VROKLAGE, the last trace of the megalithic culture on the south coast of New Guinea is found with the Marind anim. The Digul forms a definite border line of culture, and from the Mimika River as far as the extreme western point of New Guinea cultural influences from Indonesia have been at work²).

THE TORRES ISLANDS

Having finished our study of the mainland of New Guinea we must now turn to the investigation of the Torres Islands. Physically the inhabitants of all the Torres Islands are Papuans, with dark skin and often arched noses. The hair is woolly, but in some rare cases also slightly wavy. Despite some cultural influence from Australia, the people are non-Australian in physical appearance. Australian characteristics in race are found only on the islands of the Prince of Wales Group (Muralug, Narupai, Maurura, Waiben, Keriri, etc. which lie closest to Australia³). Whereas the people of the eastern group are purely dolichocephalic (Erub, Mer, etc.), in the west many brachycephalic individuals occur side by side with dolichocephalic and mesocephalic people⁴). From this, HADDON has drawn the conclusion that the whole group was once inhabited by an "ancient stock" of dolichocephalic people, but that the western islands have been overrun by a more or less brachycephalic people „who are doubtless of the same stock as those who have occupied the adjacent coast of New Guinea and the Delta of the Fly River", where we have come across them particularly

1) DEACON 186 341, VROKLAGE 917 114, 918 104, 106-108. 2) VROKLAGE 917 110, 918 105. 3) FINSCH 238 297, MORESBY 580 134, CHALMERS 130 110, HADDON 711 65 f, 97, 290; 6 210. 4) With regard to the western group, HADDON maintains the existence of an ancient and more recent stock of dolichocephalic people, the latter, according to him, having come from Daudai. 711 1 410.

on Kiwai. These brachycephalic invaders did not extend their movement to the eastern islands¹). The western islands were influenced by Kiwai in their culture also. Thus the northern islands of the western group (the Saibailaig) have pile dwellings, a type of house which spread from Kiwai westward on the mainland reaching these islands as well. It is of particular interest to note that this type of house, by way of the Western Torres Islands, seems to have exerted some influence even in North Queensland²). The languages of all the islands are Papuan, but those of the Western Group contain many elements of Australian grammar. It is particularly worth mentioning that the languages of Boigu and Saibai islands which are almost in sight of the coast of New Guinea, are a dialect of Mabuig and thus belong to the western linguistic group which has no relation to the languages of the mainland of New Guinea. And, according to Chalmers, the language of the Bugilai who inhabit the mainland near the mouth of the Mai Kussa, and who are the remnants of a big tribe decimated by the Tugeri³), is similar to that of Boigu, Saibai, and Dauan⁴), so that Australian linguistic elements would seem to have spread even to the mainland of New Guinea⁵).

Trading relations are very intensive, and one may generally state that all the islands are more or less in direct contact with one another. The canoe trade from Dibiri and Kiwai to the Torres Islands has already been mentioned, and the eastern islands as well as those of the western group are in relation with New Guinea by definite trade routes. There are hardly any direct relations between the western and eastern group but trade is nevertheless carried on by the intermediary rôle of the central islands. The relations with Queensland are much less important, although Waraber, and particularly Muralug and some of the other islands, have trading relations with North Queensland; on the other hand, Waraber has trading relations with the western and eastern islands, and Muralug has relations with Halfway Island and particularly with Mabuig, two islands which themselves have widely ramified relations with the other Torres Islands. In this way indirect contact has been brought about between all the groups of the Torres Islands, linking New Guinea with North Queensland. Thus New Guinea canoes have been traded even as far as the Prince of Wales Group and Cape York⁶).

Since, in the Torres Islands we are thus confronted with racial, linguistic, and cultural influences from New Guinea as well as from Australia, the

1) HADDON 711 I 410, 325 414 f, 329 256. 2) HADDON 711 I 300. 3) CHALMERS 130 115). 4) CHALMERS 130 110). 5) RAY 700 19, HADDON 329 13, 711 I 65 f, 93, 290, 374, III 6, V 1, SCHMIDT 834a 153, THILENIUS 860 328, WILLIAMS 946 29. 6) HADDON 711 I 28, 65, 74 f, 77, 183, 349 f, IV 2-4, 35, 37, 71, 74, 89, 101, 123, 155 f, 173, 196, 207, 309, V 1, 3, 174, 198, 202, 257, 294 f, 298, VI 112, 167, 185, 216, 222, 231, 329 13, GILL 286 206-208, FINSCH 239 42, MACGILLIVRAY 519 II 45 f, 277, etc. etc.

task of separating the possible elements of the megalithic culture in the Torres Islands will be a particularly arduous one, especially if the intermingling and overlaying of the different cultures found on the south coast of New Guinea is borne in mind. The task is indeed as truly difficult one as the following discussion will show.

Modelling of enemies' skulls with beeswax and eyes of nautilus nacre is practised on Mabuiag; and, on Nagir Island, at the death of young men, pearl-shell eyes are inserted and a nose is moulded of beeswax and wood. Modelled skulls are also mentioned from Mer¹).

Before we discuss stone-work, a word or two must be said regarding the numerous stones which, in almost all the Torres Islands, are used in magic shrines²). The mention of these stones, the use of which we have attributed to the older stratum of the Papuan culture, is justified for the following reasons: many of these magical stones which vary in size are carved as entire human bodies, human heads, or various animals³), reminding us in some way of objects which we have learned to associate with the stone-using immigrants. Furthermore, in the Murray Islands some of these magical stones were found upon or "under a cairn of stones"⁴) and cairns of stones ("agu") occur also on Muralug⁵). It is furthermore of interest to note that the Mer people believe some of the shrines to have been erected by Sido, whom we have shown to be a representative of the stone-using immigrants. In a shrine of Yam, one stone carved to resemble a human figure was said to be the woman whom the Yam people had given to Sido, and three other stones of this shrine were said to be those on which Sido, his wife, and his friend had sat down. According to the belief of the Mer people also, one stone which lay upon a cairn, i.e. a shrine erected by Sido, was said to represent the woman with whom Sido had intercourse, and it has already been mentioned that Pekai, the wife of Sido on Mer, changed into a big lava stone. A certain stone image on Erub was also said to have been made by Sido⁶). It must be pointed out however, that Sido is not the only being credited with the erection of shrines. In the case of a certain Mer shrine, the natives were uncertain whether it had been erected by Sido or Abob and Kos⁷), and the stones of another shrine of Mer associated with the Bomai-Malu cult were said to have been placed there by Malu⁸).

Now, HADDON has shown that the Bomai-Malu cult is probably one of the most recent culture drifts which came from New Guinea to the Torres

1) 711 V 258, 305, Pl. XV fig. 1, VI 268 Note 1. 2) See 711 I 76, 86 f., 105, Pl. II fig. 1, 2, V 334 f., Pl. XXI fig. 2, VI 216, 261-263, 269-271, fig. pp. 50, 53, Pl. I fig. 4, Pl. XXIII fig. 3, 4, VI Pl. III fig. 1 etc. etc. 3) 711 I pp. 27, 71, 75, 77, 88, 116 f., 137, 142, 157 f., 170, 198, V p. 347 f., Pl. XIII fig. 1, VI pp. 216, 220, Pl. IX fig. 7, etc. etc. 4) 711 I 116 f., 143 f., 158, VI 11, 42, Pl. I fig. 1. 5) MacGILLIVRAY 519 II 294. 6) 711 I 77, 140, 376, VI 20 ff. 7) 711 VI 22. 8) 711 VI 303-305, Pl. XIX fig. 3, fig. 69 p. 304.

Islands¹). Abob and Kos we shall find to be the mythological constructors of the typical stone fish-weirs of some of the Torres Islands, and it will further be seen from the description given by the myths that Abob, Kos, and Sido were all contemporaries. That Sido belongs to a relatively recent culture drift has already been shown. The myths thus lead to the conclusion that Abob, Kos, Bomai-Malu, and Sido belong to relatively recent culture drifts which in point of time were not far distant or were co-existent²). Now, if Sido is a stone-using immigrant, his synchrony with Abob, Kos, Bomai and Malu and the association of these latter with stone-work would apparently lead to the conclusion that all of them are more or less simultaneous representatives of the megalithic culture. This conclusion, however, is not permissible, since it will be seen that there is no ground for considering the stone fish-weirs of the Torres Islands as megalithic; the same seems to be true of the stone fences mentioned in connection with Bomai. Whether there are other reasons permitting us to consider these beings as stone-using immigrants will be seen later on.

HADDON has already drawn attention to the resemblance between the stone shrines of the Torres Islands and the Keraki shrines; and in spite of the association of certain Mer shrines with Malu, recorded by HADDON himself, he has expressed the opinion that these stone shrines belong to a much older stratum of culture³), an opinion which agrees entirely with our view that, in the whole of Melanesia, the magical use of stones is characteristic of Papuan culture. Since this applies to the great number of uncarved magical stones of the Torres Islands, it is likely to apply also to the carved ones, since functionally they all agree completely with one another. Stone cairns do not occur on the south coast of New Guinea as far as I know, and HADDON has shown that numerous shrine stones, including the stone images as well as the language of the magical songs and spells in the eastern islands, came originally from the western islands⁴). Since we have seen Australian influences besides those of New Guinea to be very strong in the western islands, the possibility of certain elements of this magical use of stones—the stone cairns for instance—being due to Australian influence should not, I think, be excluded. This is borne out by the fact that stone cairns occur in Muralug, Mabuiag (here characteristically in connection with the Australian hero Kwoiam), and the neighbouring Badu,

1) For this opinion and the cult itself see 711 I 98, 163, III 50, IV 210, 240, 396 f, VI 273, 282, 302 ff, 311. Wirz has even formulated the question whether Malu is not identical with the Majo of the Marind anim. Wirz 968 III 155 Note 1.

2) HADDON 711 VI 1 f, has attempted to establish the following chronology on the basis of the different types of culture described in the various myths: 1) The peopling of the Murray Islands (Pop and Kod), 2) The collecting stage of culture (Iruam, the Ti birds, Kultut), 3) The introduction of cultivation (Sido, Gelam).

4) The introduction of certain ceremonies connected with death (Aukem and Terer), 5) The introduction of the Bomai-Malu cult (the Malu story). 3) 711 I 250, VI 46, 271. 4) 711 I 88, 354, 357, IV 240 f, VI 46, 243.

as well as in certain parts of Australia ¹⁾). From the following discussion it will be seen that other types of Torres Islands stone-work were also of Australian origin. In this connection the highly important fact must be emphasized that there are many types of ordered arrangements of stones in numerous parts of Australia, stone-work which has no connection whatever with megaliths and must be much older than megaliths ²⁾).

It has been seen that the wives of Sido were said to have changed into stones. We have already concluded that Sido's association with magical shrines is no proof that these shrines are megaliths; there is as little proof for the deduction that this changing of Sido's wives into stones is reminiscent of megalithic culture. This is particularly borne out by the fact that in many of the Torres Islands myths the changing into roughly carved stones or natural rocks is mentioned in connection with various mythological characters, things, animals, and plants which have nothing to do with the stone-using immigrants. This turning into stone moreover not only appears in the myths of the eastern islands, but also in the western islands, for instance, on Mabuiag, Badu, and Muralug; and it is a characteristic theme of the Torres Islands myths in general, and is not peculiar to the myths of Sido's wives ³⁾).

In a few of the western islands e.g. on Mabuiag, Badu, Moa, some of the central islands, and notably in the eastern islands Erub, Uga, and Mer, native stone weirs for catching fish are found, called "graz" in the western and "sai" in the eastern dialect. These are walls of loose stones built up to a height of three or four feet forming curves and semicircles which enclose large areas of the reef and have a radius of one or two hundred yards. The fish that come inshore at high tide get caught in these fish-weirs when the tide recedes. It seems that no native within the memory of the present people ever made a "sai" and all they can do now is to repair them ⁴⁾).

In order to decide whether these structures are megalithic or not, we give

1) Besides trading relations which Muralug has with Cape York, these people and their neighbours resemble the Australians in that they are characterized by a collecting stage of culture in which very little tilling is done, so that MACGILLIVRAY has actually considered them as Australians changed only by contact with Papuans. 519 II 82, HADDON 711 I 67, 410, IV 2, 150, V 284 Note 1, GILL 286 200 f. 2) For this important problem see McCONNEL 512, ELKIN 222, 223, 224, 225, Dow 202, CHINNERY 151 277 Note 1, TOWLE 896, JONES 420, BASEDOW 47, RADCLIFFE-BROWN 683, etc. etc. 3) See the following myths: Ugar: 711 I 203 f; Mer: 711 I 102, IV 235, VI 11, 31-33, 53, Pl. II fig. 1, Pl. V fig. 4-8, Pl. VI fig. 2, 5, 6, 7, 8, 13-15, 16-19; Danar: 711 I 104 f, VI 26; Mabuiag: 711 I 60, V 26 f; in this latter myth a number of stone slabs is described as representing the bodies of the men killed by the Australian hero Kwoiam; Badu: 711 I 63, 374, V 18-21, 44 ff, 56-62, fig. 8, VI 41; Muralug: 711 V 17 f etc. etc. Regarding certain stones at the foot of the "funeral screens" painted with faces and representing dead persons in some of the Torres Islands see: MACGILLIVRAY 519 II 36-38 Pl. p. 37; 711 I 67, 69, 366, V 264-267, fig. 79. 4) 711 I 32, 35, 152, 186, 197, IV 119, 152, 158 f, Pl. XXII fig. 1, V 343, VI 11.

here the sources of information for the whole of Melanesia in which similar stone fish-weirs are recorded. In such a compilation one must not neglect to mention also the very wide-spread custom of erecting dams of stones, wood, plants, earth, etc. in the rivers; for it is impossible to decide *a priori* whether stone-weirs and river-dams are but two different forms of one identical fishing method belonging to the same stage of culture, or whether they are two different methods belonging to two distinct cultures. Only by special investigation is it possible to decide whether, finally, we are not confronted with a fishing method of world-wide extension.

In the following regions of Melanesia, stone-weirs similar to those of the Torres Islands are found: In all the islands of the New Hebrides, they are formed by semicircular walls built on the shores. It is not certain whether they occur in the Banks Islands ¹⁾. Furthermore, they are found on the coasts of Tikopia ²⁾, on the coasts and the inland rivers of Santa Cruz ³⁾ and in Arosi (San Christoval) ⁴⁾. It might be added that these stone-weirs occur also in New Caledonia ⁵⁾. SPEISER, who mentions the occurrence of these stone-weirs in the New Hebrides, Santa Cruz and New Caledonia, adds: "These are fishing methods which belong probably to earlier cultures" ⁶⁾. Stone-weirs occur furthermore in Sikaiana ⁷⁾, Nissan Island ⁸⁾, and on the east coast of New Ireland (particularly in Lesu ⁹⁾). Of the Laur District, ABEL record "fishing on the reef with the ... stone-net at the time of high tide" ¹⁰⁾ which is apparently a stone fish-weir. In Muliama, rivulets are dammed by a fence of stakes, leaves, earth, and clay, by which the rivulet is deviated into a dry arm ¹¹⁾. CHINNERY ¹²⁾ mentions "weirs" in the area of South New Britain (Gasmatta, Moeve Haven, Arue) in which head deformation is practised, but does not give any details. In the narrower rivers of the Gazelle Peninsula, a sand-bank is heaped up enabling the fish to be caught ¹³⁾. Stone-weirs are also found in the Admiralty Islands ¹⁴⁾, St. Matthias ¹⁵⁾, and Mailu Island ¹⁶⁾. The Mafulu make weirs of upright sticks in their rivers, the weir stretching across the greater part of the river. The side of the river left undammed is filled up with stones to such a height, that the water flowing over it is shallow ¹⁷⁾. In the Bubui River, a stone-weir was found ¹⁸⁾. In a Bukaua myth a fish-weir of stones, wood, and earth is mentioned ¹⁹⁾. In Kadda and other places on the Kabenau River in the Astrolabe Bay District, stone-weirs were observed, and they were also found in the mountain brooks

1) DEACON 184 191, SOMMERVILLE 786 377, HARRISON 344 339, COPDRINGTON 160 318, SPEISER 789 158, HADDON 711 I 153. 2) FIRTH 243 159, 405. 3) SPEISER 790 298, 796 188, fig. 33, GRAERNER 299 106, HADDON 711 I 153. 4) FOX 263 282. 5) SABASIN 758 82, HADDON 711 I 153. 6) SPEISER 793 43. 7) PARKINSON 638 223. 8) KRAUSE 440 127, fig. 93. 9) PARKINSON 630 300, POWDERMAKER 678 170. 10) ABEL 12 225. 11) KRÄMER-BANNOU 439 26. 12) 146 10. 13) KLEINITZSCHEN 432 76. 14) BÖRNSTEIN 85 317. 15) NEVERMANN 609 90. 16) SAVILLE 765 181. 17) WILLIAMSON 958 231. 18) SCHELLONG 813 610. 19) LEHNER 488 51.

of this region¹⁾. In Friedrich Wilhelms Hafen, FINSCH saw "das unter der Benennung Fischzaun bekannte uralte Fischergerät"²⁾ and damming of rivers is recorded also from the Bogadjim, but without any detailed description³⁾. Stone-weirs are further made in the Sambrigi River⁴⁾. The system of fine stone-weirs in the Sambrigi Valley is also mentioned by CHINNERY⁵⁾ who juxtaposes this with terraced irrigation and the other types of stone-work, a method which of course is not sufficient to determine to what stage of culture these fish-weirs of stone belong. Stone-weirs are also made by the Bara south of Jehi Chasm⁶⁾, by the Biar who belong to the Moaripi⁷⁾ and on the Tungom River, the north-eastern arm of the Palmer River⁸⁾. The rivers of the Kukukuku and those of the Tedi River region are "dammed" but no detailed description is forthcoming⁹⁾. On the sea shores of Viti Levu, fish fences are built of reedwork shaped like the segment of a circle, but on the large rivers the natives build stone-weirs which lead into a basket trap¹⁰⁾. Dams of sticks, leaves, etc. are made in the Lau Islands (Malaita) and by the hill peoples of Malaita¹¹⁾, in Kur-tatchi and the surrounding district, Petats Island in the Buka Passage region¹²⁾, on Goodenough Island¹³⁾, by the Doriri¹⁴⁾, and Orokaiva¹⁵⁾, on the St. Joseph River¹⁶⁾, and the Mekeo rivers¹⁷⁾. "Weirs" are known on the Waria River¹⁸⁾, in Wodsa village on the Ramu River¹⁹⁾, and dams of leaves, and other material on the Kiapou headwaters²⁰⁾, on the rivers of the Jabim, in Finsch Haven, and the Bumi River near Finsch Haven²¹⁾, on the tributaries of the Upper Sepik, on the South-West River for instance²²⁾ and in the Berlin Haven District²³⁾. "Dams" and "fences" in the rivers are recorded from the Aptelmin on the Upper Sepik²⁴⁾, on the Mubi River near Lake Kutubu²⁵⁾, and the Fimaga south-east of Lake Kutubu²⁶⁾. River weirs with sticks and grass are made by the Gogodara²⁷⁾ and the Kiwai²⁸⁾; and the Keraki Rivers were "dammed up"²⁹⁾. Fish fences of leaves were made in the Papuan Gulf, in Kerewa, Kasere, Wapo, Porome, the Purari and many villages east of the Fly³⁰⁾. Damming up with leaves and branches is practised by the Rahuk anim in their rivulets,

1) WERNER 930 183 f, 205, 931 74, ZÖLLER 969 108—quoted also by BIRO 74 67—also mentions a "fish-weir" on the Kabenau River, but says simply that it was "very artistically constructed". 2) BIRO 74 67. 3) HAGEN 333 247. 4) BEAVER 55 262, SMITH 785 330. 5) 151 281. 6) FLINT in 712 (1921/22) 142. 7) MONCKTON 577 218. 8) CHAMPION 137 61, 712 (1926/27) 103. 9) BLACKWOOD 80, 20, AUSTEN 32 345, 712 (1921/22) 138. 10) DEANE 183 Pl. p. 176, THOMSON 866 320 f, WILLIAMS 956 89 f. 11) IVENS 404 256, 259, 409 35. 12) BLACKWOOD 76 342, 356, 358, 77 85. 13) JENNESS and BALLANTYNE 417 380. 14) MONCKTON 576 212. 15) WILLIAMS 944 55 f, 237. 16) PRATT 682 129. 17) WILLIAMSON 959 286. 18) CHINNERY 144 45. 19) LAUTERBACH 463 58. 20) HIDES 359 133. 21) SCHEL-LONG 812 41, 813 610 f, BIRO 74 67. 22) BEHEMANN 58 87. 23) PARKINSON 635 30. 24) CHAMPION 137 212. 25) WILLIAMS 954 157. 26) WILLIAMS 954 293. 27) LYONS 505 341, WIRZ 970 478. 28) LANDTMAN 457 143 f. 29) WILLIAMS 946 421. 30) WIRZ 969 36 f.

on the Kumbe River ¹⁾, on the Utumbuwe River ²⁾ and the mouth of the Idenburg River ³⁾. HADDON has moreover mentioned the occurrence of stone fish-traps in Northern and Eastern Polynesia, Paumotu, the Society Islands, Cook Islands, Gilbert Islands, Marshall Islands, Palau, Yap, and Indonesia ⁴⁾.

From this survey of fish-weirs in Melanesia, and of stone-weirs in particular, it is seen that these weirs occur in many regions in which the influence of the stone-using immigrants is manifest, but that on the other hand, these weirs are lacking, or at least not recorded, in many regions influenced by the stone-using people. It is therefore impossible to draw any definite conclusion from the mere distribution of this element, nor do the myths reveal anything as to the association of it with any ethnic group. It would certainly not be permissible to trace the Torres Islands stone-weirs to the river stone-weirs of the Sambrigi River, Bara, and Tungom River, if only for the reason that stone-weirs are not known on the south coast of New Guinea; and it cannot be proved that the fish fences on the south coast belong to the same culture as the stone-weirs and were but a makeshift for the latter owing to the scantiness of stones. It is therefore impossible to trace the very highly developed stone-weirs of the Torres Islands to the south coast of New Guinea. Now, HADDON has compiled the following information regarding the occurrence of stone fish-traps in Australia, which is of particular interest. "Mrs. Langloh Parker (The Euahlayi Tribe, London 1905, p. 8) says: "There is a large stone fish-trap at Brewarrina, on the Barwan River (north-western New South Wales) ... and others have been reported in the area of the Upper Darling River". A. J. North (Records Aust. Mus. Sidney, XI, 1916, p. 123 ff, Pls. XXIV-XXVII) says they "were used throughout the greater part of the eastern portions of the continent, being found in New South Wales, Queensland, and the Northern Territory." He refers to the magnitude of the native fish-traps at Point Parker (near the Wellesley Islands, Gulf of Carpentaria); these are precisely of the same description as those of the natives of the islands of Torres Straits. They formed, in reality, a succession of walled-in paddocks of many acres in extent. Another weir occurs at Missionary Bay, Hinchinbrook Island, east coast of Queensland. W. E. Roth (Bull. 3, 1901, p. 23) gives several localities where these occur in Queensland. He says: "On Sweers, Bentinck, Mornington, etc. Islands (Wellesley Islands) stone dams are erected along the coast-line in the shape of more or less of a half-circle, the extreme of the convexity reaching sometimes to as much as 300 yards from the shore. The majority of these dams are contiguous, and built of pieces of stone to a height of from 18 inches to upwards of 3 feet" ⁵⁾. For these reasons, I think, there is no

1) WIRZ 964 105, 109. 2) HELLWIG 352 202. 3) BRUIJN 108 660; mentioned of "New Guinea" in general by DETZNER 191 203. 4) 711 I 152 f with many references; see also FINSCH 236 387 Notes 4, 238 III 56 f, 148. 5) HADDON 711 I 152 f.

possible conclusion other than that the stone-weirs of the Torres Islands were introduced there from Australia.

Since the myths ascribe the erection of stone-weirs to certain mythological characters, we shall deal with these myths at once and not in the chapter on mythological evidence. HAMLYN-HARRIS¹⁾ on the authority of GUILLETMOT says the fish-traps of Mer were built by Soido, but native testimony is unanimous in asserting that all the "sai" in Mer, Erub, and elsewhere were built by Abob and Kos, so that we can disregard the first statement. The Mer myth records the following regarding Abob and Kos: They were two brothers living with their mother Kudar on Mer, Abob being the elder, Kos the younger. Once when Abob asked Kos to go and get some firewood, Kos did not want to go, and Abob went off angry to Dauar. But Kos followed him and they went together to several points of Mer where they built numerous stone fish-weirs. At a place on the beach which was all solid stone they made large clefts, where the fish could collect; and these are convenient places for catching fish. They also cut their particular marks on the stone, so that men should know who had made these clefts, and they erected other stone-weirs. Then they went to Waier where they killed nearly all the people. Since they wanted to destroy the island, "they cut it up with their staves, taking great slices out of it; thus it is that the hill is now penetrated with large fissures so that no man can live there". Then they returned to Mer. "Some time afterwards Sido came to Mer from New Guinea". Here he met Abob and Kos and made overtures to their mother, but when they were rejected he killed her. When Abob and Kos heard of this they followed Sido to kill him but he escaped. The people think if Abob and Kos had only managed to kill Sido they would have had many more kinds of plants from his basket. After this, Abob and Kos went to Erub, Uga, Damut, Tutu, Parem, and finally to Kiwai where they remained. In many of these islands they introduced stone-weirs, and taught the people their language or suggested a different and much slower way of speaking the old one. In all these islands they changed their names, so that they appear always under different names in the various islands. Regarding the trend of this migration HADDON remarks: "This is the only account I have of culture spreading westwards from the eastern islands, but there are numerous examples of the reverse taking place"²⁾.


Leaving aside for the moment the association of Abob and Kos with the stone-weirs which we traced to Australia, we must now ask whether these two characters have any features reminiscent of the stone-using immigrants. In their myth there occur, in fact, the themes of two brothers, of a quarrel, of the creation of clefts, fissures and marks on the stone; these incidents, as well as their teaching of the languages, are certainly reminiscent of the stone-using immigrants. We are not told where they came from, their

1) Quoted by HADDON 711 I 197. 2) 711 I 152, 204, 374, 412, IV 158 f, VI 21 f, 25-28.

migration in an east-western direction is singular in the Torres Islands, and only by finally going to Kiwai do they resemble Sido who, according to one version, also went finally to Kiwai after his migrations in the Torres Islands. But, on the other hand, it must be noted that the quarrel of the brothers is not typical, since it does not lead to their separation or to any other conflicts; their creation of fissures is only a means of destruction, and their killing of the people of Waier relates them rather to the Australian hero Kwoiam, as we shall see later on. Moreover, one is inclined to infer from the myth which says "if Abob and Kos had only managed to kill Sido they would have had many more kinds of plants from his basket", that these food plants were previously unknown to Abob and Kos; on the other hand, the introduction of food plants was one of Sido's most characteristic attributes supporting the view that he was a stone-using immigrant. From this one would accordingly conclude that Abob and Kos were not stone-using immigrants in the sense as we understand that term. If this be true, they could, in fact, be assumed to be the introducers of the stone-weirs, as suggested by the myth. But the difficulty then arises that the paths of the migration of Abob and Kos do not coincide with the distribution of stone-weirs in the Torres Islands; for whereas, according to the myth, the most western points reached by Abob and Kos on their migrations were the islands Tutu and Parem, stone-weirs occur also in the western islands. We are thus confronted with difficulties not only by interpreting Abob and Kos as stone-using immigrants, but likewise by seeing in them the introducers of the stone-weirs. It is most probable, in my opinion, that this lack of clarity is due to the complex character of the Torres Islands culture. But however this may be, I think we can take it for granted that the stone-weirs came to the Torres Islands from Australia, a conclusion which is based upon the geographical distribution of stone-weirs in this and the adjacent areas.

That the erection of certain stone-works is actually associated with a migration coming from Australia is evident from the following myth of Kwoiam, on Mabuiag Island.

Kwoiam lived with his mother on Mabuiag. His mother originally belonged to Muri (Adolphus Island). Kwoiam spoke the Kauralaig dialect. He was a great fighting hero, his weapons being the javelin and the throwing-stick. Kwoiam killed his mother and then cut off her head. Then, to "revenge" her death, he went to Beka Reef, where he killed the people and cut off their heads. He loaded his canoe with these heads and then went to Saibai and Dauan, but did not fight the people here. Then he went to Daudai where he killed many people and cut off their heads, whereupon he returned to Mabuiag via Saibai and Gebar. His old canoe is now a stone on Gebar. He then fought the Pulu, Badu and Moa men, killing many of them, but finally he made his retreat up the hill off Kwoiamantra where he was killed. The Maibuiag men grieved at his death, took his throwing-stick and javelin and threw them towards Australia, saying "this style of

thing must stop on the mainland along with straight hair, wild throat, and a half wild heart". The bow and arrow, stone-headed club and bamboo knife were to remain in the islands and another kind of heart. The men placed a cairn of stones over his grave. — The only other account of a cairn being erected is in the case of the man Gwoba whom the Badu people killed, and over whose corpse they erected a cairn of sticks and stones¹⁾. Although Gwoba is of no interest to us, the fact is worth pointing out that this cairn was erected by the people of Badu, i.e. the island in the closest vicinity of Mabuia. — RIVERS learned from the chief of Muralug that, when Kwoiam was in Muralug someone gave him a throwing-stick and he went to Mabuia and remained there. Kwoiam was tall and lean, he had a slender waist and thin legs with prominent trochanters and ankles. He was repeatedly described by the people as being "all bone", "no meat", "bones stick out". His head was frequently said to be like that of an Australian. The natives of Mabuia have noticed that the head of the Australian is narrower than their own. He was also credited with a bulging forehead, a high crown and a prominent occiput, which in the opinion of the islanders, is characteristic of the Australian natives. With regard to the remark that Kwoiam had "straight hair, or "hair like a Mainlander", HADDON says: "Natives of Muralug often have hair of an intermediate character, but I have never seen any actually "straight" hair among the indigenous people of Torres Straits or the neighbouring coasts. The term "straight" in this instance must mean curly as opposed to wolly, for all agreed that Kwoiam's hair was like that of an Australian. Psychologically also, the Mabuia people recognized an affinity between Kwoiam and the Australians; like them he had a "wild throat and half-wild heart... Kwoiam had a basket like that of a mainland man, which he carried under his shoulder. He always fought with the characteristically Australian weapon, a javelin hurled by a throwing-stick, and... in the legend... his antagonists were never mentioned as using this weapon... The evidence thus points to the conclusion that Kwoiam was either a pure or half-bred North Queensland native, whose mother migrated... from Muri to Mabuia... The natives of Cape York Peninsula also talk of Kwoiam. Several reputed relics of Kwoiam are pointed out in Mabuia... The head of the unfortunate mother is still to be seen as a large boulder. The track up the hill Kwoiamantra ("Kwoiam's ridge") passes between a long double row of stones that represent the heads taken by Kwoiam on the famous voyage... On a rock... is a slight concavity, which is stained red, in which Kwoiam used to sit, and in front of it are several transverse grooves in the rock, caused, it is stated, by Kwoiam straightening his javelins there by rubbing them across the rock. Near the top of the hill is a rough  shaped wall of stones about two feet in height, which marks the site of Kwoiam's house; it is nine feet

1) 711 V 98 f.

wide, the side walls are nine feet six inches long, but there is a small central apse at the blind or western end two-and-a-half feet in depth... The grave of Kwoiam, the low cairn is nine feet in length by three feet six inches wide... The bushes of the side of Kwoiam's hill have most of their leaves blotched with red, and not a few are entirely of a bright red colour. This is due to the blood that spurted from Kwoiam's neck when it was cut at his death. (We are not told what species of shrubs these are.) On Pulu Island west of Mabuiag, there is a *gigantis* Γ shaped rock, called Kwoiam's throwing-stick" 1).

It is of interest that in this myth of the obviously Australian warrior hero Kwoiam, Kwoiam's canoe, his throwing-stick, his mother's head and the heads of his enemies became stones, that it was upon his grave that a cairn was erected, and that even his house is said to have been of stone. This considerably strengthens our view that many carved stones of the Torres Islands, the cairns and the stone fish-weirs came from Australia.

On Mer Island, the Dogai cult is practised in which dances with masks are held. There were two masks "which were said to have been kept... in a house built of small stones, the only erection of this kind known to me", as HADDON remarks. HADDON's deduction is that the Dogai cult is more ancient than the Bomai-Malu cult, which we have seen to be of recent date. The songs sung during the ceremonies are in the western language; HADDON has moreover pointed out "that there is throughout the Western Islands a belief in a class of powerful and usually malignant beings termed dogai, who are always of the female sex" 2). In view of these relations with the western islands it is all the more interesting that a stone house similar to that of Mer was mentioned in connection with the Australian hero Kwoiam of the west, and it is certainly there that we shall have to look for a solution of the problem of the Mer stone house.

We must now discuss the myth of Bomai who introduced the Bomai-Malu cult which, as already mentioned, has been considered by HADDON as the most recent immigration into the Torres Islands. According to one version, Bomai came from Tuger, i.e. the Tugeri of New Guinea, and went to the following Torres Islands: Boigu, Dauan, Mabuiag, Badu, Moa, Nagir, Yam, Murray Islands: Dauar, Waier and Mer. In all these islands the people tried to keep him, and in Boigu, Dauan, Mabuiag and Nagir they built a "fence" around him for that purpose, but he always escaped. The myth does not expressly state whether this was a stone fence, but in Dauar and Mer it was recorded that they built a stone fence around him which, however, he broke down and went away. In the other islands mentioned it is only stated that he was caught by the people, but that he went away. With regard to the stone-fence (*kegar kar*) which the Dauar people had built

1) 711 I 380, III 194-219, fig. 1, V 3, 67-83, 368, BEAVER 55 313. 2) 711 I 166 f, V 353, VI 153 f, 210, 271 f.

around him, HADDON says that it was "such as they build on the reefs of Badu and Moa". According to another version of Mer, Bomai came with his three brothers Seo, Sigar, and Kulka from their native home, which in that case was Muralug. Then they went to Tutu, Tedi reef, (between Waraber and Paremar), then Sigar went to Yam, and the three others to Aurid, where Kulka remained. Then Bomai and Seo went to Masig, where Bomai killed his brother and went alone to Mer, Dauar, Sauriod, Waier, Ne, thereafter returning to Mer. In Mer and Sauriod they made a stone fence around him to keep him back, but he escaped; in Dauar they made a rope fence, and in Waier and Ne tree fences, always with the same result, that he broke out and went away. Besides the versions indicating Tugeru and Muralug as places of origin, Bomai and his brothers were said, according to the Yam version, to be of "southern origin" ¹⁾.

In view of this information HADDON is inclined to believe that "on the whole a New Guinea origin seems more probable than one affected by Australian influence". But, according to a Tutu version, which was later received from a Mabuiag man, the four brothers came from Australia from where they migrated to Ianakau, Pinaik, Dugong Island, Halfway Island, and Dove Island. Then Seo went to Masig, Bomai to Murray Island, Kulka to Aurid, and Sigar to Yam. According to one informant, these brothers were even relatives of Kwoiam ²⁾. In these circumstances, I think an Australian origin more probable, and if, according to some versions, New Guinea is mentioned as the homeland, I think the only inference to be drawn is that the entire culture of the Torres Islands is extremely complex. It is not our intention to discuss here the cult itself, but, from the myths, it is immediately evident that Bomai and his brothers have none of those features which are characteristic of the stone-using immigrants. Although Bomai is not described in the myths as the introducer or constructor of the stone fences, and it is the people of the islands who erect the fences around him, it is certainly not without significance that the use of these stone fences is associated with those immigrants whose original home seems to be Australia. This view is strengthened by the fact that these stone fences were "such as they build on the reef of Badu and Moa" and HADDON is even of the opinion that the word for stone fence "beizar" used in the Malu songs "is apparently the equivalent of the sai", the fish-weirs of the eastern islands ³⁾; and it has been shown that these stone fish-weirs must be derived from Australia.

Sacred Plants. The use of sacred plants on the following occasions is certainly due to New Guinean influence. In a Boigu myth, a girl who likes a man gives him a branch of croton; on Mer, croton (*weswes*) is put in the ground at the head and at the foot of a grave, and the corpse is also sometimes decorated with croton. The spirit Terer which leads the spirits

1) 711 I 41, 163 f, III 51, IV 119, V 64, VI 33-40, 42-44, 298, 324 142-144. 2) 711 V 375 f. 3) 711 III 51, IV 119, VI 298, 302.

of the dead to the afterworld Boigu¹), in the dance which he holds with the spirits of the dead, is decorated with croton. In other death dances the dancers wear croton in their belts, or their heads and bodies are completely covered with croton leaves (*wez*). The house in which a corpse lies is surrounded by posts for keeping the ghost from finding the way in; to these posts croton leaves are fixed. In a divination rite in which a modelled skull is used, the divinator and the skull are decorated with the croton variety "taibi". The rain maker is decorated with croton leaves, and in his magic he uses croton among other leaves. In the Bomai-Malu cult the participants are decorated with croton leaves and a mask made at HADDON's request was also decorated with croton leaves. In a myth, the moon is described to have been covered all over with croton leaves. On Tutu and Mabuiag, the dancers who represent the ghosts wear a mask consisting of dracaena leaves (*buzi*), and in their belt they wear a croton or a dracaena plant. During their seclusion, Mabuiag girls are decorated with dracaena, and dracaena was also inserted into bull-roarers on Mabuiag. Croton and dracaena are also often used in the accoutrements of warriors of the Torres Islands²).

Mythological evidence. The preceding discussion has shown how strong is the cultural influence of Australia, an influence which has perhaps been somewhat underestimated in the past. On the other hand, there is no question but that the most important cultural drifts in this area have taken place from north to south, i.e. from New Guinea to Australia³). Some of these culture drifts, which have, however, no relation to the movements of the stone-using immigrants, appear clearly in the myths; thus, the original settlers on Mer, the two men Pop and Kod, came from the Fly River to Mer, and, according to another version, the peopling of Mer is due to a few shipwrecked women who, from New Guinea, were driven to Mer. According to the Tutu and Nagir tale, Naga who introduced masks and death dances came from the Binaturi River on the south coast of New Guinea to Daru, Uga, Tutu, Nagir, and many other eastern and western islands⁴).

From the fact already mentioned that Sido on his migrations also came to the Torres Islands, it follows that elements of the megalithic culture must have come to the Torres Islands from the north.

Furthermore, there are in the myths a certain number of other culture heroes whom we shall now discuss. According to the Badu myth, Yawar taught the Badu people how to make gardens, but they forgot, and ill-treated him rolling him by means of the rainbow across to Mer, via Moa,

1) 711 I 118, VI 31 ff. 2) 711 I 40, 116-118, IV 200 f, 235, V 203, 253, 257 f, 330, VI 6, 31 ff, 131 f, 135, 142, 146, 148, 196, 198, 268, 289, 292 f, LANDTMAN 458 501.

3) See HADDON 711 I 410; this is also the opinion of THORPE, HAMLYN-HARRIS, GRAEBNER, etc. 4) 711 I 70, 102 ff, V 48 f, VI 19, LANDTMAN 458 135; see in this connection also the Waiat myth of Mer and Mabuiag. 711 V 49-55, VI 277-280.

Met, Nagir, Getulai, Suaragi, Saddle Island, Waraber, Paremar, Aurid, Masig, and Erub. In Mer he planted the bananas, sweet potatoes, yams, sugar-cane, taro, and coconuts he had carried with him. This accounts for the greater fertility of Mer as compared with Badu¹). If this is compared with the migration of Sido who likewise introduced food plants to Mer, it is evident that Sido followed a more northern route from west to east, and that he did not touch Badu. Nothing else is recorded about Yawar to enable us to decide whether this is only a local version of the Sido myth or whether we are faced here with an independent tradition. We should not omit to mention that this name Yawar is identical with the name of the Yee anim ancestors, yavar who, as we have seen, were very likely to have been representatives of the stone-using immigrants.

There is another story which relates in a different manner the introduction of food plants to Mer. According to a Mabuiag myth, the man Gelam of Moa left Moa taking with him coconuts, sugar-cane, sweet potatoes, yams, etc. and via Nagi and Waraber, he went to Mer. In Mer he introduced these plants, as hitherto there had been no food in this island. According to a Mer version, Gelam took two long pieces of wood and stuck them in the sea. These are now Dauar and Waier. By this Gelam is even made a creator of islands, as were many of the stone-using immigrants, a theme which was not mentioned in connection with Yawar or Sido. The trend of Gelam's migration does not differ greatly from that of Yawar, but the stations of the Gelam migration are given in less detail than is the case in the Yawar migration. It is certainly striking that the introduction of food plants to Mer is attributed to three different culture bringers all of whom migrated in a west-easterly direction, but whose migrations differ more or less from one another. This is even more complicated by the fact that the people of Small River (or Cowal Creek) near Red Island on Cape York Peninsula say that Gelam came from Small River, from where he went to Moa²). Since, however, an introduction of food plants and agriculture from Australia is out of the question, it is highly probable that we are faced here with different versions of one and the same cycle of culture-bringer myths, and that local pride has assigned different homes to the hero. If this be true it would give further strength to the view that Sido is a stone-using immigrant, since in this Sido-Yawar-Gelam complex of myths, the theme of the creation of islands occurs again³).

In Mer, Uga, and even Muralug there is a tradition according to which

1) 711 I 63, 374, V 36-38. 2) 711 I 104, 374, V 38-40, VI 23-25. 3) In this connection it is worth mentioning that an Erub myth describes the artificial building of sand-banks and reefs in a way which reminds one of the erection of artificial island, as recorded in Malaita for instance. But nothing else is related regarding the characters in this myth which would in any way connect them with the stone-using immigrants. The Erub myth records that in the "old time", the Darnley people wanted to make a sand-bank, where they might get

a man saw the first coconut floating on the sea. The man, taking it for a fish, shot the coconut which then took root thus becoming known. In the Muralug version of this myth it is said that this floating coconut came from Daudai, and in the Mer version it is said that coconuts were growing on the island before, but that their use was known only after the nut had been shot¹). We can, however, disregard these traditions, since they deal more with a casual discovery than with the real introduction of the coconut; their only interest lies in the fact that in the Muralug version the coconut is said to have come from New Guinea. That the coconut was introduced by Sido (Yawar, Gelam), i.e. by the representatives of a relatively recent culture drift which we identify with that of the stone-using immigrants, is confirmed by the actual distribution of the coconut palm in the Torres Islands. We have indicated the limits within which the migrations of Sido and the analogous migrations have taken place, and it has been seen that these stone-using immigrants did not come to Australia and that they touched the western Torres Islands to a much lesser degree than the eastern islands. This is borne out by the fact that there were originally no coconuts in Australia to which country they were introduced by Europeans; and in the Torres Islands, coconut palms are plentiful in the eastern islands and on Saibai, but less so on a few of the western islands. They were formerly absent from the entire Prince of Wales Group. Thus MACGILLIVRAY found on Muralug neither coconut palms nor banana palms, and the present coconut palms of the island are not old. Probably there were a few coconut palms on Moa or Badu, and on the latter island, as in many others, they were said to have been introduced from New Guinea, and they were not plentiful in Mabuiag. As a rule there are none on the small islands, and Gill, in 1872, found that many of the islands had no coconut tree on them; some grow on Nagir, Aurid and Paremar²). It has been seen that Sido and Yawar introduced the banana palm also to Mer. It is therefore of particular interest that, according to HADDON, the distribution of the banana palm in the Torres Islands was very similar to that of the coconut³) and that on Muralug, MACGILLIVRAY found no banana trees when he visited the island. It has been mentioned that Sido was also said to have introduced the sago palm in Erub, and Erub is in fact the only island of the Torres Straits where the sago palm occurs, and the people were unanimous in stating that it had been introduced from New Guinea⁴). Although Sido and the other analogous culture bringers were not credited with the introduction of the pig,

turtle. So they began to excavate earth which was loaded upon a big bamboo raft. They pushed it out swimming alongside the raft and got as far as where Merat, the first sand-bank between Erub and Bramble Cay, now is; some of the earth fell off, thus forming the sand-bank of Merat. Farther to the north-east some more earth dislodged forming Daoor reef. The same thing happened at Tauat and Keb reefs. (HADDON 711 I 192 Pl. VI fig. 1). 1) 711 I 203, V 103 f, VI 52. 2) 711 I 24, IV 132 f, 149, V 104, GILL 286 201, 229, MACGILLIVRAY 519 II 25. 3) 711 IV 132. 4) 711 I 191, MORESBY 580 136, GILL 286 213, MACGILLIVRAY 519 II 46.

as were so many other heroes of the stone-using immigrants, it is nevertheless significant that on Mabuag pigs were said to be of recent introduction only, and it seems that at one time they were completely lacking on the island¹). It is a well known fact, the importance of which need not be emphasized, that the pig was entirely non-existent in Australia, tallying with the fact that Sido and the analogous immigrants did not touch Australia. According to another myth of Mer, a certain variety of yams was "discovered" by the woman Irado who grew out of the earth, and it is believed "it was owing to Irado having sprung from the soil, that she knew where to find the root of the ketai" (yams variety). She, as so many other characters in the myths, eventually turned into an upright stone which stands to-day behind a village, and a stone standing beside her is her basket²). HADDON remarks that no magic is connected with this stone, but that it is venerated for its antiquity. This Irado stone is actually very similar to a monolith, but nothing else is recorded regarding either it or Irado. It is therefore impossible at present to differentiate between this stone and the many other stones mentioned and considered as mythical beings having changed into stones—beings who had no connection with the stone-using immigrants.

According to a Tutu story, many wild pigs used to roam along the Binaturi River in Daudai. One in particular was noted for its great size. It used to eat the people. A man named Amubali lived there and when his wife was pregnant he, being frightened of the pig, made a raft and paddled to Mawatta, and from there over several reefs to Tutu. He told the people that he had run away from New Guinea because of the big pig. Meanwhile his wife gave birth to a boy and named him Uibali. They lived in a high tree-house because of the wild pig. The mother made her boy a bow and arrows and he succeeded in killing the pig. The boy then went off to seek his father and to tell him what he had done, and when he had found him his father returned³). This story, so often found to be associated with the stone-using immigrants, has certainly come from New Guinea since, though in a very slightly modified form, it is also known in Kiwai and Masingara. There it is said of the son who killed the boar that "he grew up very quickly", a feature which allies him to Qat and some of the other analogous stone-using immigrants. Sailing to Yam Island, where his father was, he is said to have thrown away some of the flesh of the animal he had killed, by which the reefs in the sea were formed⁴). This is another incident which closely allies him to the stone-using immigrants whom we know to be the builders of islands.

On Badu Island, there is a myth of a man Mutuk who was swallowed by a shark but cut his way out, but nothing else is recorded regarding this man¹). Beings who went up into the sky and became stars occur in a few myths but show no relation to the stone-using immigrants²).

1) 711 IV 152, V 290. 2) 711 VI 51 f, Pl. IV fig. 1. 3) 711 I 81 ff. 4) 711 I 83, LANDTMAN 458 501-504.

After having thus indicated the limits to which the culture of the stone-using immigrants has extended from New Guinea to the Torres Islands, a few words must be said regarding the theories of E. SMITH, PERRY and CHURCHILL, although the facts already mentioned are in themselves sufficient refutation of these theories. SMITH, as is well known, attributes mummification to the megalithic culture an opinion which is accepted also by PERRY, and because of technical resemblances between the Torres Islands mummification and that of Egypt, he traces the Torres Islands mummification to Egypt. He is of the opinion that his "heliolithic" culture migrated over Arabia, India and Indonesia until it reached Geelvink Bay; from there it spread along the north coast of New Guinea as far as the eastern end of this island after which it turned to the south coast extending as far as the Torres Islands from where it spread to Australia. In this way mummification came to the Torres Islands as well as to Australia, and, in the opinion of SMITH and PERRY, testifies to the influence of the megalithic culture in Australia³). SMITH as well as PERRY accordingly consider all the stones used in various ways, and particularly the carved stones in the Torres Islands, are megaliths⁴); but this opinion is fallacious as is evident from the data already mentioned. The fact that the migrations, which, in our view, are drifts of the stone-using immigrants, did not reach Australia, and the non-existence both of agriculture and the pig in Australia are sufficient proof that the megalithic culture did not reach this continent, as, also according to SMITH and PERRY, a highly developed type of agriculture is characteristic of this culture. We shall not discuss to what extent the actual distribution of mummification, or the mythological evidence regarding it, is in favour of a supposed relation of this practice with the megalithic culture in Melanesia. CHINNERY, who accepted SMITH's theories, has juxtaposed the practices of embalming, drying in the sun, the wearing of certain bones of relatives, and the wearing of dried hands, arms, and legs in British New Guinea⁵). It is obvious, however, that the problem cannot be solved by a simple juxtaposition of these apparently totally heterogeneous practices.

PERRY is most emphatic in his opinion that Australia has been influenced by the megalithic culture, and he bases this opinion on the occurrence in certain parts of Australia of stone circles, wild growing taro, neolithic implements, legendary pairs of youths who wandered about the country civilizing tribes and later departing to some other part of the earth, the culture heroes called the All-Fathers who live in the sky, etc. But he adds: "It seems certain that no irrigating, stone-working, metal-working, pottery-making people have inhabited Australia for any length of time, but that does

1) 711 I 41, 63, V 89. 2) See Boigu: 711 I 40, LANDTMAN 458 501; Mer: 711 VI 3 f; Dauan: 711 I 42 f 111, WIRZ 975 286 f. 3) SMITH 784 21-28, 93-99, PERRY 649a 199f. 4) PERRY 649 a 393, 397. 5) 151 281-283.

not mean that they have not influenced the culture of the natives" ¹⁾), THORPE ²⁾), following PERRY's reasoning, speaks actually of "heliolithic" evidence in Australia and Tasmania, but KENYON, MAHONY and MANN for instance ³⁾), have emphatically denied the megalithic character of the ordered arrangements of stones in Australia; stone circles, according to them, are simply windbreaks at such places where stone was abundant and timber very scarce. This is important, since in New Caledonia, we shall come across a similar use of stone circles. According to RADCLIFFE-BROWN ⁴⁾), the ordered arrangements of stones are totemic ceremonial grounds.

Of course it is possible that some of these elements were derived from outside and are not indigenous to the culture of the Australians, but the Melanesian evidence is against the view that these elements may have come to Australia from New Guinea, nor do we know whether they came from New Zealand or the eastern islands of Indonesia. Since this study deals with Melanesia only, I shall refrain from any judgement regarding the Australian culture. I should, however, emphasize that not all stone-work found with primitive people is necessarily megalithic. Moreover, a study which intends to show that Australia has been influenced by the megalithic culture should also try to explain why such essential elements of this civilization as agriculture, terraced irrigation, pottery, the domestication of pigs, the use of bows, etc. did not "catch on" at all in Australia, even if the contact was only short and superficial.

It is evident that on the result of this study on the Australian civilization will also depend the picture one gives of the culture of the Torres Islands. If SMITH, PERRY, CHINNERY and THORPE are right in their opinion about the culture of Australia, then this whole chapter on the Torres Islands would need revision—but only then.

CHURCHILL, in his *The Polynesian Wanderings*, has expressed the opinion, based solely on linguistic grounds, that a migration took place from Indonesia through the Torres Straits to Fiji. Against this view, RAY has already pointed out that there is no linguistic justification for the assumption of influences from Indonesia either in the Torres Straits or along the south coast of Papua. HADDON also says: "I have failed to find traces in Torres Straits of direct influence from Indonesia... What parallels there may be, can be explained in other ways" ⁵⁾). To say that the Torres Islands stone-work derives from Indonesia would not only be impossible because of the totally different character of the stone-work of the Torres Islands and the mythological evidence which contradicts such an explanation, but particularly since Indonesian influences are far too rare on the west coast of New Guinea, and by no means reach far enough to the east to influence the Torres Islands too. It has, on the contrary, been shown that on the

1) PERRY 649a 33, 125-127, 144 f, 249, etc. 2) 872a. 3) 425a, 469 f 4) 683 204 f. 5) 711 f 410.



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extensive adjacent part of the north-western coast of New Guinea, no Indonesian influences are to be found *nor* are there any traces of the stone-using immigrants.

NEW CALEDONIA

According to SARASIN, five different racial groups can be distinguished in New Caledonia, viz. those inhabiting 1) North Caledonia, 2) the region about Hienghène, 3) the southern part of the east coast, 4) the northern part of the west coast and 5) the southern part of the west coast. The smallest people are found in the first group and their number is so great that SARASIN has envisaged here the existence of an old independent short race. Here the darkest skin is found, the noses are broad the arcus superciliaris is strongly developed, strong bodily hair is frequent, prognathy occurs, the wavy hair frequent in the other groups is here relatively rare, although with young people the hair is wavy and becomes frizzy later only ¹⁾. With the exception of smaller and darker individuals in the fourth group, and prognathous individuals in group five, the stature increases from north to south, the skin becomes lighter, the hair less frizzy and more wavy and with children even straight, the nose narrower, and the face less prognathous. From these facts SARASIN has inferred that the western part of the island shows particular resemblances to Australia. The hair of the North Australian natives often shows a tendency to form spirals and, in New Caledonia the spirals have a tendency to become looser thus somewhat approaching the wavy Australian hair. Since, even in those districts of New Caledonia where the hair is usually frizzy, young people have wavy or curly hair which only later becomes frizzy, SARASIN says: "I conclude from this metamorphosis of the hair that the Caledonians have sprung from a wavy-haired stock" ²⁾. On Ile des Pins off the east coast, the skin is even darker than in New Caledonia, but besides this, elements showing Polynesian characteristics are found ³⁾. The arrival of canoes blown from Tonga, as well as an invasion of Lifou people occurred within the memory of the islanders ⁴⁾. On Ouvea, wavy hair and crisp hair are to be found, and there is dark skin as well as light skin which is lighter here than on the other Loyalty Islands and New Caledonia. On Lifou also the colour of the skin varies from dark to light brown, and ERSKINE thinks that the skin is even lighter here than on Ouvea. The hair varies from frizzy, curly and wavy even to straight in rare cases, and straight hair is admired. In Maré, the people of the eastern part of the island are very

1) Wavy hair in old people is considered by SARASIN as senile degeneration
 2) SARASIN 756 42-44, 78, 156, 759 18 f, 37 f, 51, 449 f, 499 f, BERNARD 69 257, 274, PARKINSON 630 477, etc. 3) MIALARET 567 100, ROCHAS 733 390. 4) GLAUMONT 292 338 ff, LAMBERT 454 196 f, 256, 258 f, SARASIN 758 4, 133, BROWN 107 114, MIALARET 567 98 f.

dark and smaller, those of the western part have lighter skin; and the hair also varies from frizzy to wavy; the noses are narrower, the mouth smaller and prognathly less marked than in Lifou, Ouvea, and New Caledonia. Frizzy hair is here rarer than on Ouvea, Lifou and New Caledonia, so that Maré is racially the most highly developed island of the Loyalty Group and New Caledonia. Contrary to the opinion generally held that the progressive characteristics in the race of this region are due to Polynesian influences, SARASIN maintains that, in spite of the traditions of Tongan invasions to Maré and Lifou, the Maré people represent a local specialization caused by the isolation of the island. This, he thinks, is borne out by the fact that on Maré a certain number of special varieties are found in the fauna too¹).

On the other hand, it is obvious that the Loyalty Islands were influenced in their culture by Polynesia²). An invasion of Polynesians coming from Wallis Island (Ouvea) in the middle of the eighteenth century is a well known event in Ouvea. From there secondary migrations took place to Lifou, and some colonies were founded on the east coast of New Caledonia³). This invasion had hardly any modifying influence either upon race or culture, since Ouvea in these respects is very similar to New Caledonia.

BAUDOUX⁴) records a tradition relating the arrival a long time ago of a number of men and women with red skin, high stature, straight hair, and covered with tattooings; these people landed with their canoe at Balabio Island at the northern extremity of New Caledonia, where they settled. A descendant of these immigrants who was red skinned and particularly striking by his fatness is said to have lived some time ago in a tribe near the Diahot River.

As already stated, the opinion generally held is that the more progressive racial characteristics of the whole group are due to Polynesian influence via the Loyalty Islands, which overlaid a Melanesian race best preserved in the north of the island⁵). This opinion has been rejected by SARASIN, who emphasizes that all the Loyalty Islanders are dolichocephalic, whereas the Polynesian immigrants must have been brachycephalic. The less marked dolichocephaly of Ouvea cannot be due to Polynesian influence, since the cephalic index is much lower here than in some districts of New Caledonia,

1) See: SARASIN 756 218, 250 ff, 759 40 f, 458-460, 469, 471, 763, 12, NEVERMANN 616 202, HADFIELD 331 19, 136 f, 260, DENIKER 190 769 f, LAMBERT 454 54 f, RAY 705 245 f.
 2) SARASIN 756 242, 248, 760 5. 3) Regarding this migration very frequently described see: SARASIN 758 4, 756 277 ff, DENIKER 190 797 f, RAY 705 242, 248, 278 f, NEVERMANN 616 202, HADFIELD 331 15-17, 125, ERSKINE 231 340, LEENHARDT 476 221 Note 1, BROWN 107 114, BRAINNE 90 231, GRUNDEMANN 312 366, LAMBERT 454 54 f, ROCHAS 733 392 f, etc. 4) 50 87-90. 5) MacMILLAN BROWN for instance, believes in a Maori invasion to New Caledonia and, according to him, all kinds of stone-work, stone walls, petroglyphs, etc. came directly from Polynesia. 107 114 f.

and if the mesocephaly of New Caledonia were due to Polynesian influence via Ouvéa it should of course be more marked on Ouvéa than on New Caledonia. It is therefore likewise impossible, according to SARASIN, that the other more progressive characteristics should derive from the Loyalty Islands. SARASIN is of the opinion that three solutions of the problem can be envisaged: first that an invasion took place from Fiji, since there exist some racial resemblances between Fiji and the Loyalty Islands. In this case the Fijian invaders would necessarily belong to a group which has mixed relatively little with Polynesian elements. There are, however, neither material nor mythological indications in favour of such an assumption, as SARASIN himself has pointed out. Secondly a connection between New Caledonia and the Southern New Hebrides might be assumed, a view which is, however, likewise rejected by SARASIN. SARASIN is therefore of the opinion that no racial intermingling has taken place at all, but that the more progressive characteristics of the race and certain variations in the culture and language developed on the spot, whereas originally culture and race were uniform in their character. The obvious Polynesian influences have only modified the material culture of the Loyalty Islands (the use of coconut rasps, cuttlefish hooks, rectangular houses, etc. is due to them), but anthropologically have left no traces¹). Now, mainly on account of the round houses of New Caledonia and the eastern Torres Islands, SARASIN believes that there was a migration from the eastern Torres Straits to New Caledonia. This view, he thinks, is strengthened by the racial resemblances between the New Caledonians and the Australians²). Cultural resemblances with Australia have already been pointed out by GRAEBNER who instances the occurrence of stick-like clubs, throwing-cords, platform burial, etc.³). A few students, basing their opinion on the similarity of the round houses, have maintained a migration from New Caledonia to the Torres Islands⁴). If we disregard some differences in the constructional details of both types of houses, differences which have been remarked upon by SPEISER and MONTAGUE⁵), there still subsists another difficulty in tracing the Australian resemblances of the races of New Caledonia to the eastern Torres Islands; for, although the eastern Torres Islanders are dolichocephalic and Australian culture influences are quite probable, they do not show any Australian influence in their race. Moreover, the languages of the Torres Islands, including those of the eastern group, are non-Melanesian in type, whereas New Caledonia has a Melanesian language.

1) SARASIN 758 3 f, 759 472 ff, 764 188 f. 2) SARASIN 758 2 f, 134, 311, COMPTON 167 97. Since the character of the fauna and flora of New Caledonia is also ancient, SARASIN thinks that New Caledonia and Australia were formerly connected. 756 34 f. 3) 298 734 ff. 4) HADDON in SARASIN 758 174. 5) See 711 I 301, SPEISER 798 183 f; the problem of the round house, as such, in Oceania is still unsolved, as SPEISER has pointed out, and RIVERS also was unable to attribute the round house to any of the different cultures he had worked out. RIVERS 725 II 457 f, 590.

An excellent and most thorough analysis of the New Caledonian culture has been made by SPEISER. The oldest and, perhaps, first culture which came to Eastern Melanesia is, according to SPEISER, an "Ur Kultur" to which he attributes the round house, burial in the extended position, axes with blades directly inserted into the shafts, etc.; burial in caverns also belongs to an ancient culture. According to SPEISER it is an open question whether this "Ur Kultur" was Papuan or Palaemelanesian. Basing his view on certain cultural resemblances between the Southern New Hebrides and New Caledonia, SPEISER believes that both these regions once possessed a common, very poor culture, which he calls the "primitive Nambas culture" and which from Arue over the Central New Hebrides came to New Caledonia later than the "Ur Kultur". We are not concerned here with these cultures. Since, as SPEISER argues, New Caledonia possesses a certain number of cultural elements which do not exist in the Southern New Hebrides, it must be concluded that the contact between these two areas was interrupted after the spread of the Primitive Nambas culture; and these culture elements must have been brought by a later Austronesian culture wave which did not touch the Southern New Hebrides. LEENHARDT has pointed out a certain number of elements of culture which, according to him, existed originally only in the northern part of New Caledonia from where they spread to the south. By this he is in contradiction with SARASIN who maintained a uniformity of the Caledonian culture. These culture elements, according to LEENHARDT, are birds on chiefs' houses, house statues, masks, pottery, the hoe, burial in the sitting position, burial with the head above the surface of the ground, irrigation, etc.¹). According to information which SARASIN obtained from a native, masks were actually believed to have spread from North to South New Caledonia²). Since in the Southern New Hebrides these elements are absent, they must, according to SPEISER's reasoning, belong to the more recent Austronesian culture drift which came to New Caledonia only. Since almost all the elements enumerated by LEENHARDT occur on the Sepik, SPEISER has concluded that these elements were brought to New Caledonia by immigrants from the Sepik who, furthermore, introduced monoliths which occur on the Sepik also, the cultivation of taro and yams, the cult of skulls, etc. Since many of these elements are identical with those which the immigrants brought to Malekula, SPEISER is of the opinion that actually two migrations took place, both of which started from the Sepik at the same time. The fact that the culture elements mentioned occurred originally only in the northern part of New Caledonia, indicates that the immigrants arrived first at the northern extremity of the island. Only a few of these elements subsequently came to the Southern New Hebrides from New Caledonia, as, for instance, the practice of irrigation which came to Aneityum and Futuna. The complete absence of the pig in New

1) LEENHARDT 476 9, 12, 27, 33, 69, 106, 145, 147, 216 f, 221. 2) SARASIN 758 240.

Caledonia¹⁾ according to SPEISER is due to the fact that owing to the length and duration of the sea voyage it was impossible to transport and keep pigs alive²⁾.

SPEISER has thus clearly expressed the opinion that New Caledonia was invaded by a group of stone-using immigrants, who anthropologically, he thinks, have become absorbed in the aboriginal population³⁾. It has been seen that the more progressive racial characteristics were explained by many writers as Polynesian influences, whereas SARASIN, basing his assertions on the cephalic index, maintains that development took place on the spot. In spite of the more primitive characteristics on the northern extremity of the island, I consider it quite possible that certain more progressive racial characteristics may be due to the influence of the stone-using immigrants, an influence, which racially as well as culturally has often been misinterpreted as "Polynesian" in many parts of Melanesia. In these circumstances therefore it is possible that the tradition telling of the immigration of red-skinned people at the northern extremity of New Caledonia applies to the immigration of the stone-using immigrants rather than to people returning from Polynesia. A definite answer to this question is, however, not possible until we have a better knowledge of the cephalic index of the stone-using immigrants.

LEENHARDT has come to the conclusion that the coconut palm cannot be of ancient date in New Caledonia because it has not been known long in the interior of the island, and is not mentioned in ancient traditions nor used in magic, whereas it is mentioned in more recent traditions⁴⁾. Now this is exactly what we should expect if it was the stone-using immigrants who introduced the coconut here, as they did in the other regions. This view is furthermore strengthened by the fact that coconut palms are particularly abundant in the north of the island⁵⁾, where the immigrants must have arrived first.

The extreme isolation of New Caledonia permitting the forming of certain quite peculiar elements of culture (e.g. perforated stones, small round-headed adzes, round disk-like ceremonial objects etc.)⁶⁾ is also evident from the trading relations which exist only between the Loyalty Islands and New Caledonia reciprocally, and between the coast and the interior of New Caledonia. Ile des Pins trades with New Caledonia and Maré. It is very significant that even in modern times the Loyalty Islanders knew nothing whatever of the New Hebrides⁷⁾. Except on the northern

1) For this see BRAINNE 90 16, 18, SARASIN 758 72, ERSKINE 231 370, SPEISER 793 55, 208, 795 74, 797 130 ff, 148 ff, 182, LAMBERT 454 204. 2) SPEISER 795 74, 797 130 ff, 148 ff, 182, 798 173 ff. 3) Because of the differences in the patterns of carving, WILLITSCH denies that there is any connection between the Sepik and New Caledonia. 962 332 f. 4) LEENHARDT 476 22, 157. 5) SARASIN 758 61, LEENHARDT 476 46. 6) SARASIN 758 311. 7) SARASIN 758 108, 110, 763 7, HADFIELD 331 104, 135, 171, 173, 198, ERSKINE 231 347, NEVERMANN 616 202 f, BAUDOUX 50 38 f, 262 f, etc. etc.

part of Ouvéa where the purely Polynesian language of the Wallis Island immigrants is spoken, the languages of the other Loyalty Islands and New Caledonia are Melanesian with some words similar to Polynesian. But, although classified as Melanesian, these languages are very different from the typical Melanesian languages of the Central New Hebrides for instance, as well as from those of the Southern New Hebrides. FRIEDRICH MÜLLER has in fact considered the Maré and Lifou languages as Papuan in type, but this is disputed by all the other scholars, and particularly by RAY. RIVERS has called the language an "aberrant Melanesian language" or an archaic Austronesian language¹). This corresponds most nearly to the view held by EICKSTEDT who, on the basis of anthropological data, has classified the New Caledonians among his "Palämelanesiden"²).

The typical house in New Caledonia, the Loyalty Islands and Ile des Pins is the round house. The dwelling houses differ from the chief's and men's houses in size only the two latter being larger. All the round houses are built upon a foundation of earth called "boeamoa" the sides of which are often faced with stones. This earth mound is often heaped up upon a layer of stone slabs, and, as in front of the entrance to the house a pathway is cut through the mound so as to leave free access to the house, this basic layer of stone slabs is visible. The earth foundation is sometimes over three feet high particularly "dans les vallées sujettes aux inondations" says LEENHARDT. Frequently the foundation is surrounded by an earth wall which is faced with stones, and on which ornamental plants are grown. Occasionally the front of the house is approached through a short "drive" enclosed between two low stone walls.

The oval houses built in the gardens or on the sea shore for the purpose of temporary stay during the cultivation of the gardens or in the fishing season also always stand upon a small earth foundation faced with a few stones. It is, however, significant that the rectangular houses which are apparently due to Polynesian influence are built directly on the ground without any foundation³).

Whatever may be the final decision regarding the origin of round houses—whether they are derived from the eastern Torres Islands or attributed to a more general "Ur Kultur"—the problem is how are we to explain the use of house foundations and the stone and earth-work they imply. House foundations were found on Erromonga, in the northern New Hebrides, in many of the Solomon Islands, in certain regions of New Ireland, and Rossel Island; they do not occur on the Sepik, but they are known among the Tugeri, and on Frederik-Hendrik Island they even took the form

1) RIVERS 725 II 476, SPEISER 798 173; see also RAY 705 47, 50, 298 ff, NEVERMANN 616 218, SARASIN 758 56, 756 77, 759 16, 476, 479, etc. 2) 221 664. 3) LEENHARDT 476 1-9, fig. 1, SARASIN 756 45, 94 f, fig. 15, 16, 57, 58, Pl. III fig. 79, 95, 758 129 f, Pl. 29 fig. 1, Pl. 30 fig. 2, 764 168 f, LAMBERT 454 127 f, COMPTON 167 98 f, BERNARD 69 285.

of little islands, and it is significant that in both these regions they were also erected on account of the swampy character of the country. It has, however, been seen that these house-mounds can be traced to the use of "draining ditches", the idea being rather to raise the earth above the water level than to drain; and this custom of making draining or other ditches was found to be very wide-spread in New Guinea including the Sepik region and those areas culturally related to the Sepik. It would therefore be possible to trace the New Caledonian house-mounds to New Guinea, but here again our investigation shows that there is no need to maintain, as SPEISER has done, that a direct migration took place from New Guinea to New Caledonia, since elements of the identical megalithic culture occur likewise in many of the intermediate areas, although the most marked resemblances are those existing with New Guinea. Our judgment of the stone and earthwork of the New Caledonian houses will depend to a great extent upon the degree to which the stone-using immigrants can be shown to have influenced New Caledonia in other respects too.

Regarding the space in front of the New Caledonian (not the Loyalty Islands) houses, LEENHARDT¹⁾ gives the following description: "Devant sa case, pour voir qui vient et accomplir les cérémonies de plein air, il établit un large espace clair ... Cet espace ... est partagé en allées. Sur une toute petite pente et de préférence sur la crête des petites croupes, le Canaque a aplani le sol ... Il a surélevé la surface nettoyée en une chaussée de cinquante centimètres de hauteur, disposée en léger dos d'âne, longue de dix à soixante mètres, large de cinq à douze. Il l'a bordée, à distances régulières, d'araucarias symboliques ou de cocotiers plantés. Cela forme une fort belle avenue à l'extrémité de laquelle se dresse la grande case. Cette allée s'appelle le boeweye. De chaque côté, une contre-allée parallèle, le sère. Elle est moins large. Le sol n'en a pas été surélevé en chaussée ou dos d'âne. Elle est bordée d'araucarias, de cocotiers ou d'érythrines. Ces deux sortes d'allées sont constantes et essentielles. Mais il peut s'en ajouter deux encore, toujours symétriques: l'iwiri, parallèle au sère et ... le kavirhè-peri, parallèle à l'iwiri ... Toutes ces allées sont recouvertes d'un gazon fin et soigneusement entretenu. La grande allée, boeweye, est destinée à recevoir les monceaux de vivres, des grandes fêtes et à servir d'esplanade pour les danses. Le tertre de la case forme autour de celle-ci un rebord d'un à deux mètres. Il comporte trois endroits dangereux. Sur le devant, sont déposées les pierres sacrées où résident les esprits des ancêtres. Dans l'espace devant la case et tout proche du tertre se trouvent deux foyers: l'autel de l'igname et l'autel des autres végétaux."

LEENHARDT gives the following explanation of his fig. 5:
c. Bois aux pieds desquels sont enterrés des paquets magiques.
d. Mémoires consistant en perches et poteaux plantés.

1) 476 16 f, 22 f, fig. 1, 5.

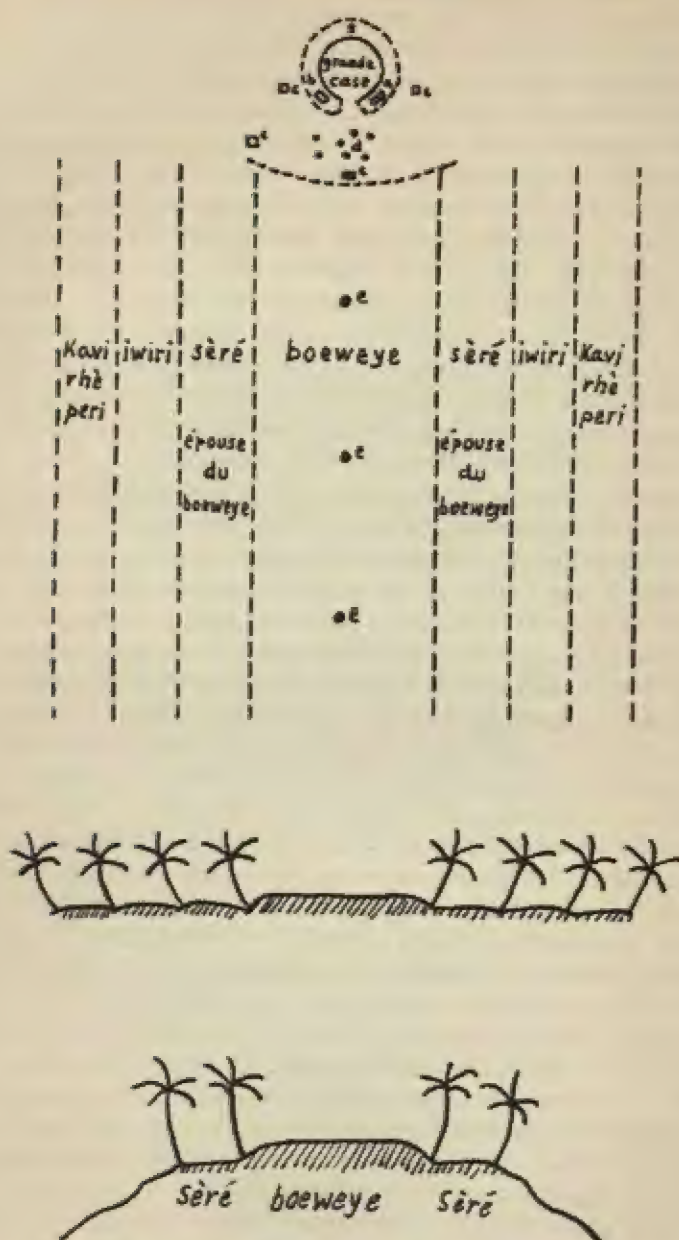


Fig. 22. Plan and cross section of New Caledonian dancing ground (After LEENHARDT 476 fig. 5 p. 15)

e. Perche marquant les limites du terrain concédé à chaque groupe de clans dans le partage des vivres.

f. Autel.

g. Partie du tertre spécialement tabouée.

Au centre: Coupe des mêmes allées.

Au dessous: Coupe des allées sur une croupe. Disposition la plus ordinaire où figurent seules les allées essentielles¹⁾.

"Une plante se retrouve auprès de la case de l'autel et des grandes divisions du boeweye. C'est ... une cordylina, le diro ... Elle est le symbole de l'homme sur le boeweye, et près de l'autel la marque de sa possession et de sa puissance ... A l'autre extrémité de l'allée, au bas du boeweye, on voit souvent une érythrine ... Elle représente à l'opposé du diro, l'élément ... féminin ... Les deux contre-allées, le sère at l'iwiri n'ont point de mâts plantés permanents ni de diro; mais on trouve sur les bords du sère, divers arbres d'essence aqueuse et souvent même, au lieu de cocotiers, l'érythrine doru²⁾."

It is obvious, in my opinion, that this New Caledonian arrangement is identical with the park-like dancing grounds of the Sepik and the other regions of New Guinea, whose association with the culture of the stone-using immigrants we have shown. As in New Guinea and the New Hebrides, earth-shifting is carried out for levelling the ground; all these places are bordered by certain shrubs planted according to a definite scheme; as in New Guinea, they form a long and broad avenue and at the same time remind one of the other typical avenues of the New Hebrides and other regions of Melanesia; like the park-like dancing grounds, the New Caledonian grounds also are "recouvertes d'un gazon fin et soigneusement entretenu" and functionally too they are the dancing and feasting grounds. It is much to be regretted that nothing else is recorded regarding the "pierres sacrées où résident les esprits des ancêtres" which were found on the front part of the house-mounds, but it is clearly evident that at least functionally they agree with the monoliths which, in the New Hebrides as well as in New Guinea were also erected, although at a greater distance, in front of the club houses. SPEISER points out that such stones do not occur in the Southern New Hebrides, so that they cannot belong to the "Ur Kultur"³⁾. The description of the altars is unfortunately not very detailed either. It might furthermore be mentioned that the "memorials consistant en perches et poteaux plantés" particularly as regards their position in front of the house, remind one strongly of the "Zierhügel" of New Guinea; and here too, as in the New Hebrides where the space behind the club house was the most sacred, this spot is "spécialement tabouée".

In New Caledonia, Maré, and Ile des Pins a certain number of tumuli were found. In New Caledonia they were observed by PIROUTET in the vicinity of Koumac, Gomen, and at Pointe Ma in the south. From the in-

1) LEENHARDT 476 15. 2) LEENHARDT 476 21 f. 3) SPEISER 798 181 f.

formation that they harboured a "diable", PIROUTET concluded that they were burial places. When, later, the tumulus of Pointe Ma was destroyed, human bones lying upon stone slabs were said to have been found, but this statement is an isolated one and is not confirmed by any other source. On Ile des Pins, COMPTON and MIALARET found about fifty dome-shaped tumuli of earth, 20 feet in diameter and 6 to 8 feet high. Excavations furnished nothing of interest, and the natives were ignorant of the purpose of these tumuli. SARASIN found no tumuli on New Caledonia, but some on Maré. One of these was built up of coral blocks and was about 17 feet high; it was "crowned by an upright stone-block 1.25 meter high and of rectangular section, which resembled a small menhir". Another tumulus was only 12 feet high and without the crowning stone block. The present Maré natives ascribed these tumuli to the mythical Elétok¹⁾ who were said to have inhabited the island before the present population, and who were exterminated or dispersed by people coming later. But nothing is known regarding the purpose of these tumuli. According to LAMBERT, they are memorials of war, death or the birth of a chief, etc.; but nothing definite is known regarding their purpose, nor do we know whether they were burial places. No tumuli have been recorded so far from Lifou and Ouvea²⁾.

It has been seen that in the New Hebrides there were tumuli on Aore and Malo and, according to the Malekula myth, a tumulus was erected over the dolmen-grave of Kabat. Since also in the Aore tumulus a "stone-table" was found, it is very probable that all these tumuli were actually graves. But as in New Caledonia and Maré the significance of the tumuli is entirely unknown, comparison can hardly be made at present. Even if we are right in identifying the Aore and Malo tumuli with the mythological Kabat-tumulus of Malekula, and in attributing all of them accordingly to the culture of the stone-using immigrants, nothing from the knowledge we possess at present would entitle us to identify the Elétok with the stone-using immigrants. Some cairns have in fact been found to occur at many other places in Melanesia, and in New Guinea they were recorded from Mailu Island, the Waria River and the Sambrigi Valley. But their function was probably different, and they are also smaller than the tumuli of New Caledonia and Maré. We have, however, mentioned the occurrence of stone cairns on Murray Island, Muralug, on a grave on Badu and on the grave of the Australian hero Kwoiam of Mabuiag. This latter stone-cairn particularly was of somewhat greater dimensions thus resembling somewhat the tumuli of New Caledonia, Maré and Ile des Pins. If SARASIN's view of an eastern Torres Islands origin of the New Caledonians, or at least some elements among them, is accepted as an explanation of the Australian affinities in New Caledonia, it would also be possible to trace the tumuli to

1) Regarding the Elétok see SARASIN 756 232 f, 758 4, 10. 2) SARASIN 756 213 f, 268, fig. 141, 758 10 f, 53, Atlas Pl. 3 fig. 1, 2, 3, 760 10, fig. 9, 763 11 f, COMPTON 167 101-103, MIALARET 567 11 f, LAMBERT 454 p. 66 f.

Australia, whence they would have come to New Caledonia, Maré and Ile des Pins via the Torres Islands. In these circumstances it is uncertain whether the stone upon one of the Maré tumuli which was "like a small menhir" was actually a menhir or not. It will be seen later that stone cairns and tumuli graves occur also in Fiji. On one of these Fijian tumuli there were also upright slabs of coral stone. Moreover, many other types of Fijian stone-work also are similar to that of New Caledonia, such as monoliths, stone walls, and house-mounds. There is no possible way of showing any direct relation between Fiji and New Caledonia, but as far as the New Caledonian structures are actually megalithic, their resemblance with Fiji is due to the fact that both these areas were invaded by similar stone-using immigrants coming from different directions.

Tumulus-like graves which are frequently mentioned in earlier records must be distinguished from the tumuli, the significance of which is unknown. COOK mentions a chief's grave in the Balade District, covered by a heap of earth; FORSTER saw the grave of a chief covered by a heap of earth four feet high; another tumulus of a dead chief was found on Balabio Island. LABILLARDIÈRE describes a grave in the Balade District which differed from the others in being built of stone from its foundation to the middle of its height. DE ROCHAS says likewise that the graves of chiefs are heaps of earth. It is, however, remarkable that SARASIN found no tumulus-like graves ¹). From the information quoted it will be seen that tumulus-like graves seem to occur particularly in the north of the island, but we cannot be sure that the facts we have compiled from various sources of information are complete, or whether they correspond to the actual distribution of these graves.

Among the various methods for the disposal of the dead, the most frequent in New Caledonia is exposure in clefts of rocks and caverns; this type of burial occurs in the whole of New Caledonia from north to south. In some cases either the corpses were laid on stone slabs or stone slabs were laid on the corpses, or the corpses were separated from one another by stone slabs set up vertically. By such rectangular walls of stone slabs a certain number of niches are formed in each of which there is one skeleton. The entrance to some of these caverns is closed by a low stone wall. In one of the niches formed by stone slabs in the north-west part of the island, an upright menhir-like stone block about three feet high and of quadrangular section was found; SARASIN says that this was "probably the burial place of a chief". Another cavern between Oubatche and Hienghène in which the dead were exposed, was fenced-in by a low stone-wall. SARASIN has repeatedly emphasized that this type of burial was usual only in the case of people of higher social status, "whereas at the burial places of unimportant people, particularly those of women, the remains of numerous skeletons were

1) SARASIN 758 269, COOK 169 301, FORSTER 258 231, LABILLARDIÈRE 452 228, BRAINNE 90 31, 33 f, DE ROCHAS 732 271.

dispersed without any order". The bodies were generally deposited in the sitting position. Near Kanala, where the bodies are not exposed in caverns but in the open air, "it can still be recognized that on the steep slopes small semicircular terraces of stones had been erected, upon which the bodies were exposed".

In the Loyalty Islands, the bodies of the dead were likewise exposed in caverns and clefts in the rocks. Here too, the skeletons in the caverns were surrounded by semicircular or rectangular walls of stones 12 to 16 inches high. In this case again SARASIN states: "The burial places surrounded by stone walls, in which a single or several bodies (in families?) are separated from one another, point always to the higher social status of the dead; the bodies exposed in this way are mostly those of men. The unimportant people were buried in common graves without any separation of the bodies... Such common graves often contain only the skeletons of women and children". In one cavern in which the skeletons were separated by stone walls, pieces of European cloth were found still sticking to the skeletons, indicating that this burial must have taken place at a relatively recent date. In the Loyalty Islands, the skeletons are mostly in the extended position, but, though burial in the sitting position has not been discovered, it is not unlikely to have existed. It might finally be added that SARASIN in excavating an abri near Netché on Maré, at the depth of 20 inches found limestone slabs covering an extended skeleton¹).

Now, the question arises to what stage of culture can we attribute this type of stone-work? It cannot be traced to the New Hebrides, for neither exposure in caverns nor the stone-work connected with it are customary there, neither can the stone walls of the cavern in Fate be compared with this type of stone-work since in Fate it was not connected with burial; if there were any relation at all it would point to influence from New Caledonia to the Southern New Hebrides rather than in the opposite direction. SARASIN has repeatedly stated that stone-work was usual only for men, and particularly for men of importance and chiefs. If one bears in mind RIVER's scheme, frequently confirmed also in the course of this study, that the chiefs represent generally the former immigrants, and if furthermore we take into account that in New Caledonia the most frequent position of skeletons was the sitting position, one would be inclined to conclude that the stone-work used in connection with the exposure of the dead in New Caledonia was due to the influence of the megalithic culture; for not only have we found the sitting position to be the characteristic mode of burial of the stone-using immigrants, but for New Caledonia, SPEISER likewise attributed it to his megalithic immigrants who came to New Caledonia from the Sepik. The following objections to this must, however, be made: if owing to the

1) SARASIN 756 65-67, 79 f, 150, 234-238, fig. 42, 43, 50, 143, 144, 758 261-274, Pl. 67 fig. 1, 2, 3, 6 Pl. 68 fig. 2, 759 162, 760 14 f, 763 13, 764 167, 193 f.

secondary sexual characteristics it was easy for SARASIN to distinguish between male and female skeletons, the higher social status of some of these dead is his own conjecture rather than a fact confirmed by traditions or statements of the natives. Moreover, from the fact that earth burial in the sitting position with the head above the ground belongs to the megalithic culture, it cannot be concluded that exposure of the dead in the sitting position must also belong to that culture. SARASIN is certainly right in considering the exposure of the dead in caverns and clefts as a very primitive type of burial, such as found in Europe in the early Palaeolithic, and we have already mentioned that SPEISER also ¹⁾ has accepted this view. SARASIN considers this exposure in the sitting position as none other than "die alte australische Bestattung von Hockerleichen in Erdlöchern" ²⁾. It is of course conceivable that the ancient custom of exposing the dead in caverns has mingled with the more recent burial in the sitting position and the use of stone-work; but the wide-spread and uniform extension of this custom over the whole of New Caledonia and the adjacent regions seems to be against such a view, and an Australian origin is therefore more probable, as has already been suggested in the case of the tumuli. Whether the stone-work mentioned in connection with this mode of burial can be considered as megalithic or not depends upon the final settlement of this question of burial.

BROWN ³⁾ has recorded dolmens or thrilitons from Ned Caledonia, but SARASIN ⁴⁾ has doubted this, since ARCHAMBAULT ⁵⁾ did not find any dolmens though he searched a long time for megaliths; and the statement that ARCHAMBAULT "ne nie pas qu'il s'en puisse trouver, surtout d'enterrés" ⁶⁾, does not alter this fact.

In the vicinity of Pam village, on the north-western extremity of the island where the Diahot River falls into the sea, in the swampy ground of its right bank a single row of stones at intervals of about 4 to 5 metres was found extending over more than 200 metres. The stones were of quartz or slate and had no definite form with the exception of one, the fourth on the southern end of the row, which was shaped like a small menhir. This stone protruded about 20 inches from the swampy ground, the others, however, much less; some had almost completely sunk into the soft ground. On the whole, SARASIN counted 40 stones, but a few very big gaps seemed to indicate that some of the stones had been removed. LEMIRE ⁷⁾ the discoverer of this row of stones in 1884 counted 45 stones. According to the unanimous affirmation of the natives, it is a victory memorial, every stone representing one enemy killed and eaten, the largest, menhir-like stone representing the enemy's chief. LEMIRE further records a similar kind of memorial in the region of Bondé, where 142 stones were found standing in

1) 793 54. 2) SARASIN 758 270. 3) 107 115. 4) 758 11, 174. 5) 21 291.
6) 22 745. 7) 495 148.

a row, and where the stones were likewise said to represent enemies killed. Although it is impossible to determine the age of these rows of stones, SARASIN is of the opinion that owing to the geological conditions of the Diahot District, the row of stones of that region cannot be very old. SARASIN has compared these rows of stones with the alignments of the Bretagne ¹⁾. SPEISER has not hesitated to consider these stones as menhirs brought by the immigrants who, according to him, came to New Caledonia from the Sepik. This is also borne out by the fact that both these rows of stones were found in the northern part of the island, where the stone-using immigrants must have landed first. SPEISER has identified these stones with the many monoliths of the New Hebrides which represent, however, "the dead in general" and not enemies slain ²⁾. The setting up of stone for enemies killed has also been found in Fate, and in Fiji also we shall come across stones representing enemies eaten, and there too they will be seen to belong to the megalithic culture ³⁾.

The numerous accounts given by ARCHAMBAULT have not helped to clear up the problem of a wider occurrence of monoliths; for a great number of natural stone blocks with and without petroglyphs were considered by him as monoliths, although these stones, apart from their petroglyphs, showed no other trace of human workmanship. He mentions, for instance, a certain "stele in Braga with petroglyphs" ⁴⁾, but the accompanying picture shows clearly that this is nothing else than a natural rock bearing petroglyphs: with regard to a big stone block in the vicinity of Kanala "atteignant au moins quatre mètres de hauteur, assez lisse sur la plus grande partie de son pourtour, sauf du côté regardant le sud où elle garde encore ses aspérités naturelles", ARCHAMBAULT says "cette haute pierre conique offre peut-être quelque rapport avec les menhirs bretons" ⁵⁾. But this stone again is simply a natural rock. A fragment of stone about three inches long and carved with a human face found by ARCHAMBAULT ⁶⁾ leads the recorder of ARCHAMBAULT's finds to the quite erroneous statement: "Le fait signalé par M. Archambault n'est nullement exceptionnel parmi les innombrables monolithes, qui parsèment les solitudes Calédoniennes. Il en est un certain nombre qui ont été entaillés ou retouchés de façon à offrir une ressemblance suffisante au gré de l'édificateur, soit avec divers animeaux hiératiques, soit avec certains appareils portant témoignage exceptionnel pour

1 SARASIN 756 114 f, 758 11 f, Pl. 3 fig. 2, 3, 760 7 ff. 2) 793 49. 3) On the other hand, it will be remembered that on Mabuig the track up the hill of the Australian hero Kwoiam passed between a long double row of stones which represented the heads taken by him. Since, however, nothing of this kind has been found in the eastern Torres Islands, the fact that these stones were found on the northern end of New Caledonia leads to the conclusion that they are the work of the stone-using immigrants. 4) 24 Pl. 42. 5) ARCHAMBAULT 19 261 f; see also 22 521. 6) See SARASIN 758 305, Pl. 73 fig. 7, LEENHARDT 476 2.

l'industrie de l'époque" ¹⁾). From the literature with which I am acquainted I can find no basis for assuming that there are any carved monoliths in New Caledonia ²⁾. But a certain number of worked phallic stones have been found in New Caledonia. On Mt. Panié, the highest mountain of New Caledonia, SARASIN found planted in the ground a phallic upright slate stone 14 inches long, of round section and pointed at both ends. According to SARASIN, it is very similar to the phallic stones of North-west Santo. The natives were entirely ignorant of the meaning of this stone, and said only that it was due to the "vieux dans les temps". GIGLIOLI has described a phallus-like stone from the finds made by Glaumont; this stone is 15 inches long, 7 inches in circumference and pointed at one end. LEENHARDT has also found a phallus-like stone ³⁾).

Basing his opinion on a picture published by SARASIN ⁴⁾ SPEISER states: "The custom of surrounding cult places and idols with stone circles is also found in New Caledonia" ⁵⁾; and he compares this with the stone circles of the Northern New Hebrides. As far as I know there is, however, no mention in the existing literature of any ritual significance of the stone circles in New Caledonia. LEENHARDT mentions an *auracaria* "entouré de quelques pierres" erected as a memorial of an important event ⁶⁾, but it is not certain that this is actually a stone circle. LEENHARDT ⁷⁾ also pictures a circle of stones surrounding four stones symmetrically arranged as a cross, but he records no ritual meaning of this. Near Kanala, ARCHAMBAULT found a number of natural rocks one of which had petroglyphs. "Ces blocs" he says "entouraient un grand espace à peu près circulaire. Sans doute, il ne peut y avoir là qu'une bien lointaine analogie avec le cromlech celtique" ⁸⁾. But this assertion is as doubtful as all the other information of ARCHAMBAULT regarding "megaliths". SARASIN has found a certain number of stone circles in the middle of which he saw ashes and charred wood. He gives the following information regarding their meaning: "In reply to my question concerning the significance of these circular stone walls, the natives stated that they were sleeping places for the night. I did, however, not attach much importance to this statement until, on our ascension of Mt. Humboldt in the south of the island, our own carriers erected a similar resting place for the night. On the bank of the Ngoi River with the big rubble stones of the river, they built a stone circle about 20 inches high and about 13 feet in diameter". "Then around a fire burning in the centre they stretched themselves out radially, to sleep. The circular wall protected them against the cool wind of the night" ⁹⁾. SARASIN is quite right in drawing from this

1) ARCHAMBAULT 23 33. 2) No statuettes of stone are known in New Caledonia. Anthropomorphic stone idols of Lifou, the largest of which was 16 inches long, were attributed by SARASIN to Polynesian influence. 758 296 f. 3) LEENHARDT 478 295, fig. 152, SARASIN 758 303 f, Pl. 73 fig. 1, 2. 4) 756 fig. 105. 5) 793 50, 208. 6) 476 43 Note 2. 7) 476 fig. 12 p. 30. 8) ARCHAMBAULT 19 262. 9) SARASIN 756 137, fig. 80, 758 136, Pl. 32 fig. 4, 760 11 f.

the conclusion that: "For the prehistorian it is useful to know that stone circles with remains of ashes in the centre are not necessarily anything than temporary resting places".

With regard to Maré Island, SARASIN gives the following information: "Councils are generally held in the chief's house or feast house, but Dr. Deniker made a photograph on Maré... of a meeting place of the old men in the forest. There was an oval and levelled place surrounded by a stone wall about one metre high in which two entrances were left. In the centre there was a stone heap about one metre high said to be reserved for the speaker" ¹⁾. But this is apparently not a stone circle of the usual kind but a place surrounded by a stone wall.

Stone walls erected for defence were found on many mountain peaks of New Caledonia; some of these stone walls run from the mountain to the sea or across the valleys in order to close the entrance to the valley. On Maré Island the less steep and therefore more easily accessible part of a hill serving as refuge was closed by a stone wall ²⁾.

At various places of New Caledonia, a great number of stone heaps have been observed, often arranged in quite a definite manner, as for instance, in the form of crosses, rectangles and sometimes constituting short walls. These are old battle grounds, and the stone heaps are said to have served as a defence as well as a store of throwing-stones; or it is said that the defeated party took refuge on these elevated platforms ³⁾. According to information given by the natives, there were formerly a great number of fortified houses in New Caledonia. In Koua, the remains of such a house were found surrounded by a round stone wall in which a small entrance had been left ⁴⁾.

In North Caledonia, although members of two or three clans live in a single village, yet each one has its own quarter, separated from the neighbouring quarters by a stone wall ⁵⁾. Fortified villages no longer exist to-day in New Caledonia and they must have been rare also in earlier times. FOLEY records the existence of fortified villages — Pouébo for instance, without, however, indicating the character of these fortifications. PATOUILLET records that Bogota village and another village on the shore were surrounded by a circular stone wall 16 inches high with an entrance on the land side ⁶⁾. In Pénélo on the coast of Maré there are semicircular courtyards in front of the houses surrounded by a high stone wall; pigs are kept

1) SARASIN 758 243. 2) SARASIN 758 206 with many references, 756 224 f, 757 231 ff, 764 139, BERNARD 69 289 f, LEENHARDT 476 34 f, fig. 14. 3) SARASIN 758 206 f, GLAUMONT 291 109, GARNIER 277 49, LEENHARDT 476 36 f, fig. 15, 34; It is necessary to distinguish these from certain stone heaps which were erected for purposes of magic. See LEENHARDT 476 36 Note 1, 241-243, fig. 46, 47, 48; to this applies perhaps also LABILLARDIÈRE 452 II 204 f. 4) LEENHARDT 476 35. 5) WEDGWOOD 923 7 from LAMBERT 454 82. 6) FOLEY 255 604, PATOUILLET 644 75, SARASIN 758 128.

in these courtyards to protect them against the sea wind¹⁾. Whether this erection of walls is an old custom or originated after the introduction of pigs we are not told. On Lifou the villages are surrounded by walls of coral blocks and, SARASIN records that "In Képénéé the compounds are surrounded by walls of coral stones"²⁾.

In order to judge these different types of stone walls it must be recalled that stone walls have been encountered in many regions of Melanesia including the Northern and Southern New Hebrides, as for instance, Fate, Erromonga, Tanna, and Futuna, but that they are completely non-existent in New Guinea. If we were to accept SPEISER's opinion that all cultural elements found in at least two of the three areas — the Southern and Northern New Hebrides and New Caledonia—belong to the Nambas culture³⁾, we should attribute these stone walls to the Nambas culture. Such a conclusion, cannot, however, be drawn, since stone walls are much more extensively known than the Nambas culture. It is quite possible that in some regions, particularly in the Loyalty Islands, Polynesian influences had been at work, but several types of these stone walls will be found in Fiji, where other types of stone-work also show remarkable resemblance with those of New Caledonia. We shall be able to show definitely that in Fiji these stone walls were erected by our stone-using immigrants, and it is therefore highly probable that this is also true of New Caledonia. In New Caledonia, however, these influences of the stone-using immigrants have mixed with Australian and more recent Polynesian influences. If it is borne in mind that the migration of the megalithic culture to New Caledonia cannot have taken place in the direct way from New Guinea as SPEISER has suggested, the absence of stone walls in New Guinea is no obstacle to our deductions, since stone walls occur in many other areas which must likewise have been touched by the stone-using immigrants.

The most remarkable type of taro culture in New Caledonia is that on terraces on the slopes with an extensive irrigation system. Since the time of Cook it has aroused the admiration of many observers and has therefore

1) SARASIN 756 234, 758 138. 2) SARASIN 758 138, 756 264; NEVERMANN in his study of Lifou published in 1935 gives the following account: "Formerly the Lifouans lived in small village compounds consisting of a few houses, but now they live in big villages in which the houses lie on the sides of a long street. The village street is bordered on both sides by a stone wall which, in Xepenehe, is about one kilometer long. The wall is about 1.30 metre high and is built of coral blocks heaped up one upon another without the use of mortar. In front of each house there is a staircase of two or four horizontal coral slabs. Some of the graves are surrounded by quadratic coral stone walls, giving the impression of concrete, 70 to 100 cm high in which one entrance is left." NEVERMANN 616 208, fig. 7. It is clearly evident that the conditions found by NEVERMANN are due to European influence, for SARASIN's and NEVERMANN's descriptions apply to the same village Képénéé. A well near Képénéé surrounded by a stone wall—NEVERMANN 616 203, fig. 2—is probably also due to European influence, as are also the stone houses which for some time past have been erected on Lifou. 3) 793 208.

very frequently been described. A rivulet coming from the mountains is dammed at a certain point by a barrage of stones and clay and its course is deviated. Channels bordered by stone walls follow all the irregularities of the slopes and flow into a slightly concave terrace. When this terrace is full, the water flows through a hole in the earth wall surrounding the terrace, or through another channel, into a lower terrace. This continues until the foot of the slope is reached, and the slopes are thus divided into a certain number of superimposed terraces. The aqueduct which DE ROCHAS saw near Balade¹⁾ was eight to ten kilometers long and another seen south of Mt. Dore was three kilometers in length²⁾. The length of these aqueducts corresponds to the length of the terraces. Those which GLAUMONT saw near Téné, extended over no less than 100 kilometers. To-day the ruins of these terraces and channels are found. In the valleys, the irrigation ditches are of various forms, round, rectangular, etc. Owing apparently to the permeable character of the coral soil there are no irrigation systems in the Loyalty Islands³⁾.

LEENHARDT gives the following account of the cultivation of yams in New Caledonia⁴⁾. "L'igname est cultivée en terre rapportée et meuble. Les Canaques obtiennent ces conditions en amoncelant de la terre en un massif affectant la forme d'un long boudin. Des massifs en boudin ainsi juxtaposés dans la plaine apparaissent séparés par de profonds sillons... Généralement le côté du sillon extérieur à la montagne est maintenu par un mur de soutènement construit ... en pierres sèches ou avec des mottes". This corresponds completely to the rows of earth heaped up by the Toro and Tugeri on account of the swampy character of their country and on which taro is planted, a practice which at the same time led to the excavation of ditches.

The constructors of the irrigated terraces were, according to traditions, the Payamaja, or Panyamanya—the corrupted pronunciation of their name. LEENHARDT gives the following account of them⁵⁾: "Le peuple, qui d'après la légende, a précédé les Canaques actuels et leur a enseigné l'art des cultures irriguées en gradins, les Panyamanya, aurait habité le massif du Mé Maoya. Nous avons pu visiter l'endroit. Nous avons en effet trouvé des traces bien conservées d'anciens tertres; mais ceux-ci étaient semblables à ceux qui existent aujourd'hui. Si donc la tradition qui concerne cet endroit est exacte, et il n'y a pas d'arguments à lui opposer, les plus anciennes populations de Calédonie pratiquaient l'art de bâtir sur des tertres et, partout, avec un plan de construction identique. La tradition des Panyamanya semble indiquer que la case ronde actuelle est un monument authentique de la vieille Calédonie". Now, if the terraced irrigation in New Caledonia is due

1) 732 170. 2) VIEILLARD et DEFLANCHE 908. 3) BRENCHELY 92 344 f, 347, ANDERSON 18 211, 222, 229 f, BRAINNE 90 10, 243 f, LEENHARDT 476 6, 16, 112, 477 324 Note 3, 328 f, NEVERMANN 616 204, CHRISTMANN 156 11 60, 78, SARASIN 756 54, 758 70, 764 170 f, SPEISER 793 44, COOK 169 IV 490, BERNARD 69 281, LAMBERT 454 215 f, GLAUMONT 294 46-49, COMPTON 167 101; 4 p. 294. 4) 476 112 f. 5) 476 6.

to the influence of the megalithic culture, as we shall actually discover, LEENHARDT's conclusion would imply that the New Caledonian house foundations are megalithic in character also. Although there is no reason to doubt the tradition which has it that the Panyamanya inhabited the Mé Maoya Range, there is no proof that the remains of house foundations found there, similar in every way to those of the present day, belong to the period of the Panyamanya and are not of relatively recent date. LEENHARDT's conclusion regarding the round house can accordingly neither be upheld. All the accounts which LEENHARDT has given regarding the Panyamanya contain nothing which would entitle us to identify them with any definite stratum of the culture ¹⁾.

The problem of terraced irrigation cannot therefore be solved solely upon the New Caledonian evidence. Since PERRY and ELLIOT SMITH have attributed terraced cultivation and irrigation to the megalithic culture ²⁾, and since, as already mentioned, SPEISER also ascribes this practice to the stone-using immigrants from the Sepik ³⁾, the following examination of this problem for the whole of Melanesia shall be inserted here.

Artificial irrigation occurs on Aneityum and Futuna in the Southern New Hebrides ⁴⁾. Since this practice is lacking in the Central New Hebrides, but occurs in the Northern New Hebrides, and since, on the other hand, there are obvious culture relations between the Southern New Hebrides and New Caledonia ⁵⁾ it is highly probable that the irrigation system of Futuna and Aneityum is due to New Caledonian influence, as SPEISER has also maintained. The practice of irrigation occurs also on Vao Island where the water of a river is conveyed into the gardens by means of a bamboo aqueduct ⁶⁾. In North and West Santo, the irrigation of taro gardens is carried out in the following manner. Across one of the streams a dam of great boulders is laid from which intake often very long channels branch off skirting the slopes. They are generally cut into the earth and sometimes even into the rock. Or long aqueducts of bamboo carry the water for a considerable distance to the taro gardens arranged on the terraced hillsides with stone parapets, or to level places divided by banks and ditches into a chequer board of beds ⁷⁾. Also in Central Pentecost there is a certain amount of irrigation for taro growing ⁸⁾, and irrigation on long banked-up

1) The myth of the casting of the skin and the origin of death, so frequently occurring in Melanesia, is here associated with the Panyamanya, and in another myth the building of a canoe is recorded of them; see LEENHARDT 477 385-388, 448 f; but neither these myths nor any others contain any incidents of interest to us.
2) PERRY 651 135 ff, 654, SMITH 784a. 3) 798 181 f, 191. 4) SPEISER 797 129, INGLIS 402 23. 5) As examples of this culture contact we have already enumerated the existence of petroglyphs in Aneityum, Erromonga, and Fate, the use of nephrite pendants on Tanna, the rare occurrence of the drum and of pigs on Tanna, the use of the throwing stick on Aneityum, etc. 6) OLIVEAU 624 344.
7) SPEISER 790 131, 146, Pl. 35, 792 165, 179, 793 58, RAY 698 707, BAKER 39 33, HARRISON 343 250, BOURGE 88 180, DEACON 185 479, 497. 8) DEACON 187 143, SPEISER 790 218.

terraces is found on Aoba Island¹). In Maevo the taro gardens adroitly disposed on the slopes of the hills are irrigated by means of channels²). And finally a system of terraced irrigation for the taro gardens is practised in the Banks Islands³).

DEACON has drawn attention to the fact that the distribution of terraced irrigation in the New Hebrides agrees with the distribution of the dual organization⁴). From this he has concluded that the system of irrigation for taro does not belong to his "Secret Society Culture" i.e. the megalithic culture, but to the culture which, according to him, preceded the megalithic culture and which, in his view, is characterized by a light-skinned people, the use of kava, the Tagaro Myths, etc.⁵). We have, however, already shown that there is no reason for separating the Tagaro myths from the Qat-Ambat myths, and we have learned the light-skinned people to be precisely the representatives of the megalithic culture. (We have not in fact associated Kava with the megalithic culture nor with any other culture preceding it.) Moreover, the fact that the use of stone-work and earth-work is connected with the practice of irrigation, and that in all those islands of the New Hebrides in which irrigation occurs, megaliths or other elements of the megalithic culture are also to be found, leads to the conclusion that terraced irrigation must certainly be attributed to the megalithic culture. This is borne out by the fact that, in the other areas of Melanesia where terraced irrigation occurs, the presence of the stone-using immigrants is clearly manifest.

Although we shall not in this work make a thorough study of the social organization, it must nevertheless be emphasized that in the other regions of Melanesia in which terraced irrigation is practised, the dual organisation is, as a rule, non-existent, as the following data will show. In Tikopia, for the irrigation of the taro gardens the water is carried from the hill slopes in an aqueduct of areca palm trunks supported on poles⁶). Abundant stone-work has been mentioned on this island. The people are divided into four, non-exogamous groups, and this and other features of social life and the general culture suggest Polynesian influence⁷). It is possible, however, that the existence of the irrigation system here is due to influence from the Banks Islands, an influence which, as we have already seen, was manifest also in other respects. On the north coast of Guadalcanar from Point Cruz to the east "taro gardens with artificial irrigation covered all the slopes"⁸). I do not know whether this practice occurs also in other parts of Guadalcanar. Many elements of the culture of the stone-using immigrants have been found on Guadalcanar. Now, although the dual organization exists in some of the other regions of Guadalcanar, the north coast has matrilineal

1) DEACON 185 497, SUAS 807 247. 2) JOLY 419 367, SPEISER 790 99, DEACON 185 497, COBRINGTON 160 303, COOTE 171 133, 172 68. 3) SPEISER 793 25, 55. 4) DEACON 185 497. 5) DEACON 184 705. 6) KNIBBS 434 186, FIRTH 243 27, 57. 7) FIRTH 243 361, 363, 246 111, 113 f, RIVERS 725 1 303, etc. 8) PARAVICINI 626 60, FRIEDERICI 268 96.

clans¹⁾. PERRY records that, according to information he received from HOCART, terraced irrigation for taro is practised on a large scale on Kulambangra Island, north-west of New Georgia²⁾. Traces of the megalithic culture have been mentioned on this and, particularly, on many of the neighbouring islands. I am not aware, however, of any record regarding the social organization on this island. In North Bougainville, inland of Cape Laverdie, PARKINSON came to a river "where by means of small channels the water was conveyed into the taro gardens"³⁾. This information is not confirmed by any other author as far as I can see, but it will be remembered that in North Bougainville and the Buka Passage region, many proofs of the megalithic culture have been encountered. In the social life there are numerous clans with matrilineal descent, but a dual system seems to form the basis⁴⁾. In the Admiralty Islands "l'île de Baluan possédait une grande montagne dont les flancs extraordinairement fertiles soutenaient de riches plantations en terrasses"⁵⁾. On Poam Island "there were a great number of terraced gardens of taro and other plants surrounded by carefully heaped up stone walls"⁶⁾. Irrigation is not mentioned by the sources of information. Now, it was precisely on Paluan and Poam that stone-work had been found, and it has been seen that these islands were a centre of the Mantankor whom we have learned to be the representatives of the stone-using immigrants. The type of social organization in the Admiralty Islands, including those islands inhabited by the Mantankor, is that of totem clans⁷⁾. On Goodenough Island in the D'Entrecasteaux Group, they built circular stone walls beneath their villages on the slopes; then laboriously they carried earth in baskets and filled up the walls behind, until they formed a succession of artificial terraces sustained by stone walls, on which they grew their yams. Whereas MONCKTON expresses the opinion that "certainly the yams there grown were larger and better than any others" and "the gardeners also had the advantage of being covered by sling fire from the village towers", THOMSON believes that this form of cultivation affords a means for the profitable utilisation of mountain faces; and HADDON thinks that by these stone walls the soil is to be prevented from being washed away⁸⁾. However this may be, all the sources are unanimous in recording the existence of terraced cultivation although irrigation is not mentioned. It will be remembered that megaliths were found to occur on Goodenough Island. Sociologically here again there exist totem groups with patrilineal and matrilineal descent⁹⁾. The greatest interest has been aroused by the irrigation system of Wamira in the Wedau District, Bartle Bay. This irrigation system consists of a main race, one and a half miles in length, having its

1) HOGGIN 377 236, 388 64, 389 22, 391 Map. 2) PERRY 654 16 f. 3) PARKINSON 638 257. 4) BLACKWOOD 75 212-214, 76 32-38, 41, PARKINSON 630 661, etc. 5) BROEK D'OBRENAN 98 175. 6) SCHNEE 837 204. 7) NEVERMANN 608 317 f, CHINNERY 146 56, etc. etc. 8) MONCKTON 576 39, THOMSON 868 29, MACGREGOR 520 87, HADDON 329 232. 9) JENNESS and BALLANTYNE 416 67-69, 73, etc.

intake in the East River, near the foothills of the coastal range. Here a weir of stones about 3 feet high, and about 100 yards in length, dams the river. The race is well graded and travels around the spurs of the hills. The main canals are ditches about 5 feet wide and a foot or 18 inches deep, the lateral ditches being of the same type only reduced in scale. At one point the race crosses a creek by means of an aqueduct of hollowed logs. This aqueduct is 86 feet long and elevated 30 feet above the creek bed, and is supported by two sets of wooden uprights on both banks of the gully. The area served by the distributing channels totalling 6 miles in length is about 1000 acres. The information regarding the origin of this system is without interest¹). We have learned this region to be one of the richest areas as regards the megalithic culture, and the strong cultural contact between this region and the D'Entrecasteaux Islands has likewise been pointed out. The social organization of this area is that of totem clans with matrilineal descent²). CHINNERY has recorded terraced irrigation in the Mt. Chapman District in the interior of New Guinea³). He reports furthermore: "I found terraced beds of yams on the mountain sides at the head of the Lakekamu River"⁴). Irrigation is not mentioned by CHINNERY and would actually be improbable in the case of yams plantations. It will be remembered that stone cairns, a stone mortar, and a certain use of croton and dracaena were found on the Upper Waria; that a stone pestle was found on the neighbouring Lakekamu, and a stone mortar and pestle in the Boli District; and we have furthermore shown that Mt. Chapman is situated on a line along which the stone-using immigrants were likely to have crossed this part of New Guinea in an east-westerly migration. As far as I can see very little is recorded regarding the social organization, but on the Middle and Lower Waria the people are divided into totem clans with matrilineal descent⁵). The terraced irrigation of Fiji will be described in the discussion on that archipelago.

In his brief survey of terraced irrigation in Oceania, PERRY has included the few cases known to him of draining ditches of New Guinea, and CHINNERY⁶) has followed his example. Whether such a juxtaposition is justified cannot of course be decided *a priori*, since drainage and irrigation are two diametrically opposed practices, and MURRAY is certainly right in rejecting an indiscriminate identification of these two practices⁷). It should, however, be emphasized that the digging of ditches and the shifting of earth necessarily connected with drainage and irrigation are common to both these practices; and both are undertaken in the interests of agriculture.

1) SELIGMAN and STRONG 778 361, 364 f, Pl. p. 359, MONCKTON 576 106, NEWTON 617 123 f, CHINNERY 151 281; 712 (1919/20) fig. p. 42, Pl. p. 43, (1925/26) 43 f, fig. p. 99, (1927/28) p. 17. The intake is called "gana". Now, although stone circles in Wamira and Wedau are called "bolabola", it should at least be noted that the word "gana" is somewhat reminiscent of "gahana", the word for stone circles in Taupota, Milne Bay, and Fergusson Island. 2) SELIGMAN 770 446 f, 450, 741 f, NEWTON 617 162-164, LISTON-BLYTH 500 467 ff; 712 (1924/25) 41 f, etc. 3) 154 453. 4) 151 281. 5) CHINNERY 144 30, 45-50. 6) 151 281. 7) See MURRAY 598 112.

Since we have actually found good reasons for attributing the practice of draining ditches to the stone-using immigrants, we are inclined to conclude that drainage and irrigation are but two different forms of one genetically identical custom, the one supplying the gardens with water which they lack, the other withdrawing the superfluous water.

We can thus accept SPEISER's view that the terraced irrigation of New Caledonia belongs to the megalithic culture. But the distribution of this custom in Melanesia again shows that the migration of the stone-using people to New Caledonia has certainly not taken place in the direct way which SPEISER has suggested¹).

It is essential that we now discuss the hitherto unsolved problem of petroglyphs. Some writers have attributed them to the megalithic culture. Petroglyphs are found over the whole of the island of New Caledonia from the extreme north to the extreme south as well as in the interior. On the west coast, which for the most part consists of sedimentary stones, and where crystalline stones more suitable for the carving of petroglyphs are rarer, petroglyphs are less frequent. For the same reason petroglyphs are lacking on the Loyalty Islands which are of coral formation. The stone blocks are either isolated or stand in groups. In opposition to the opinion of Archambault who believed he had discovered on these stones signs suggesting artificial workmanship, polishing, setting up, definite arrangement, transport, etc. and who took these rocks for megaliths, SARASIN says quite rightly: "He was an unduly imaginative man and the numerous pictures published, show but rough natural stone blocks and rocks. I have seen nothing else in New Caledonia". The most frequent designs are crosses, spirals, circles, ovals, some anthropomorphic patterns, etc. The natives were ignorant of the origin of the petroglyphs. ARCHAMBAULT has interpreted these designs as astronomical symbols, indications of the direction of the winds, and even letters of various ancient alphabets, of course pure imagination only²).

1) In the region of the Wantat people on the southern slopes of the Finisterre Range, VIAL has observed a peculiar, and in fact, very mysterious custom. A great number of holes varying from 15 to 60 feet in diameter and 7 feet at the deepest part were dug one above the other on the crests of spurs on the hillsides at certain intervals. Water was brought by channels and bark flumes from a gully over two miles away to distribution pools, from which it was piped by bamboo tubes to the holes. Then at a certain moment and in the presence of a great number of visitors, they cut the retaining earth wall of the holes one after the other, beginning from above, the lower always a few seconds after the cutting of the higher one, so that all the holes were opened within half a minute. The water shot down combining into a great torrent. After half a minute it was all over and the people returned home. The purpose of this custom is entirely obscure, since the natives gave many different explanations. VIAL thinks it may be that one reason is the pleasant sense of power it gives the natives to see the destruction they have caused. VIAL 906 340-345. We mention this because of the great amount of earthwork which this custom involves and because of the carrying of water by bamboo aqueducts. 2) Also BONNEMÈRE 87 63 ff. has seen similarities between the New Caledonian petroglyphs and those of the megaliths of the Bretagne.

ARCHAMBAULT imagined that the petroglyphs were the work of a vanished race which inhabited the island long before the present natives, or of adventurers of various origins who came to New Caledonia in search of gold. It is well known that PERRY and other writers have thought this to be the reason for the migrations of the megalithic people¹). LEENHARDT attributes the petroglyphs to an earlier, prehistoric race, and LUQUET regards them also as the work of the New Caledonians and not of intruding foreigners. SARASIN too is against the idea of foreign introduction, since the petroglyphs extend over the whole of the island; therefore, SARASIN is certainly right in rejecting as pure imagination the opinion expressed by BROWN²) who traces the petroglyphs to Polynesia. "In my opinion", says SARASIN, "the Caledonian petroglyphs seem to be related to the drawings and carvings on the Australian stone churingas"³).

The petroglyphs of Erromonga and Aneityum, and perhaps also the rows of holes in the stone on Fate, are, according to SARASIN, due to New Caledonian influence, but SPEISER⁴) has doubted the soundness of this opinion.

The petroglyphs thus present a very difficult problem. SPEISER, in his thorough analysis of this area, declares that he is actually unable to determine to what culture the Caledonian petroglyphs belong⁵). I am afraid that even a survey of the petroglyphs of the whole of Melanesia will not furnish a definite answer to the problem; for petroglyphs are somewhat rare in Melanesia and in such an investigation the question immediately arises whether we are entitled to treat rock paintings and rock carvings together and to take them, *a priori*, as the expression of one identical culture. Furthermore, this investigation would require an exact comparison of the different styles used, a comparison beyond the scope of this work. We nevertheless give a short survey of the data at hand.

The carvings of frigate birds, bonitos, footprints, sharks, a man's head with a hat, etc. found on the Three Sisters Islands, Santa Anna, and Ulawa, all of which we have learned to be associated with the megalithic culture, have nothing to do with the Caledonian petroglyphs, since the subjects represented are entirely different. On Vatulele Island, south of Viti Levu, rock paintings were found by PAINE⁶). On Yasava Island, north-west of Viti Levu, VOGAN found "several temple-caves containing about 150 ancient inscriptions" and "also the carved head of a man with a monkey jaw"⁷). The "inscriptions" are carved in the rock, and the head is "eight feet from chin to crown". The word "temple-cave" has in fact no meaning, and it is to be regretted that VOGAN gives only a drawing and not a photograph of the head of a man. VOGAN has accompanied his observations by fanciful ex-

1) PERRY 651 170 ff. 2) 107 115. 3) ARCHAMBAULT 19 257, 259-262, 266 f, fig. 3, 20 689-691, 693, 697 ff, 703 f, 706 ff, 711, fig. 13, 17, 22 519-522, 525, 527 f, 530. SARASIN 756 10, 758 10-12 NEVERMANN 616 217 f etc, etc. 4) 793 50 5) 797 154, 798 182, 192. 6) 625 149 ff. 7) 910 101, 103, fig. 2, 3.

planations and one would like to know with certainty whether what he saw was actually a head carved in the rock or whether he only imagined it to be one. VOGAN gives the following description of his finds on Vanua Levu¹): "I discovered another old settlement of Asiatics... situated on the southern coast of what may be called the lower-jaw of Vanua Levu... below Fawn Hill... Upon a ridge... lie about sixty great flat rocks... bearing deeply cut symbols or letters"²). The geographical distribution of these petroglyphs within the Fijian Archipelago is too sporadic to permit us to draw any conclusion as to their connection with any of the existent cultures. From the data known so far it is highly improbable that there is any relation between these petroglyphs and those of the Solomon Islands, nor can anything be said regarding their possible connection with the New Caledonian petroglyphs. Crude drawings of a desired woman are painted in red dye by the present-day natives on Boieng Island (Tanga Group) on the limestone wall of a cave as a kind of love magic. This, it is unnecessary to say, has nothing to do with our problem. WILLIAMS in his work *Papuan Petrographs* has compiled a part of the information regarding New Guinean petroglyphs. Following J. H. STEWARD (*Petroglyphs of California and Adjoining States*, University of California Press, 1929) he has used the word "petroglyphs" to include both rock-carvings and rock-paintings. "It is impossible to treat them separately throughout", says WILLIAMS, "owing to their frequent existence together on the same sites... and to the probability that the carvers and the painters were of one and the same people". This existence side by side of both these techniques found actually in New Guinea, and the different subjects represented, make it impossible to assume any relation existing between the New Guinea petroglyphs and those of New Caledonia. In the D'Entrecasteaux Group, rock-paintings were discovered on Goodenough Island⁴), and Fergusson Island⁵) and rock carvings were found on Normanby Island. In the Sisia District of Normanby, in addition to the actual carvings, there were numerous pock holes about 1 inch to 1½ inches in diameter and ½ inch to 1 inch deep. In one area about 3 feet square, there were 50 or more of these holes. They were said to have been caused by cracking of nuts on the rock⁶). These holes are in some way reminiscent of the similar holes of Fate. Since, however, in both these regions their origin and meaning is quite unknown, and since this is an entirely isolated occurrence, it would be premature to presume any direct relation. It has already been mentioned that WILLIAMS has classified, without discriminating between them carved monoliths or carved stones belonging to the megalithic stone circles of Boianai and Wedau, and petroglyphs⁷). But real petroglyphs have not been recorded in the Goodenough Bay District, as far as I know. Rock-carvings repre-

1) 910 101, fig. 7, 8. 2) 910 101, fig. 7, 8. 3) WILLIAMS 950 121 f. 4) JENNESS and BALLANTYNE 416 198 f. 5) WILLIAMS 950 130 f. 6) WILLIAMS 950 130-132. 7) WILLIAMS 950 131.

senting human faces were found on Rook Island¹). In the hinterland of Finsch Haven, in the vicinity of Hapao village on the Gao River (a tributary of the Bubui), rock-carvings in a cavern were discovered by PILHOFER. The subjects represented are birds, forearms with hands, axes, triangles, circles, clubs, etc. The axes differ from the adzes used to-day in this area, in that their cutting edge is parallel and, not at right angles to the handle, and they thus resemble European axes. PILHOFER is of the opinion however, that the "show rather greater resemblance with the beautiful axes of the Hagen Range"²). This assertion would be of great interest in determining to what culture rock-carvings belong if the probability of European influence could definitely be excluded. In the district of the Buang tribe on the Snake River, rock-paintings in red pigment were found representing men with a long tail and wearing head-dresses, crosses, etc. The natives were ignorant of the origin of these drawings. Somewhat similar drawings of tailed men have been observed in the Naba region and near Chimbu³). On the little island Boesa north of Manam, two stone slabs were discovered⁴) covered with deeply carved patterns and figures, the figure of a woman lying down being the most frequent. "Der Untergrund der Gravierung ist gelb; darüber liegt rote Farbe" says HÖLTKE, so that carving and painting actually occur here together. The petroglyphs are attributed to the spirit Lalau, but nothing is recorded regarding him, although it is perhaps significant that his name contains the syllable "lau". Rock-paintings were found at Bomana, some 11 miles from Port Moresby. The natives of to-day know nothing about their origin. The paintings were in a red monochrome colour. There was a cassowary, figures of a man, and various designs including a scroll pattern, a figure which might represent a tortoise, a drawing of what appeared to be a star, a double chevron, a figure depicting a man's face, a crescent, and a man's hand⁵). In the Sogeri District, i.e. some twenty miles further inland than Bomana, rock paintings were found. The paintings consisting of chevrons, anthropomorphs, etc. were in several colours; many paintings had first been deeply incised into the rock and then painted⁶), so that carving and painting again occur here together. "Rather than to postulate a vanished race of petroglyphers I would attribute", says WILLIAMS, "these primitive works to the direct forbears of a section of the present population"⁷); but he does not indicate the reasons for his opinion. Finally, rock-carvings have been found at Lohomunidabu, close to the eastern border of the Sogeri region on the headwaters of the Musgrave River (a tributary of the Kemp Welch River). They were made upon two granitic boulders in the centre of the village and on one detached fragment. They are for the most part well-developed anthropomorphs, characterized by ornamental extensions on their heads which

1) NEUHAUSS 605 410, 606 529, fig. 1, 531, *Anthropos* IX (1914) 1031. 2) 660 8-10.
3) VIAL 905 66 f. 4) HÖLTKE 395 a 290. 5) STRONG 850 185 f, 712 (1921/22)
24 f, Plates 1-9, WILLIAMS 950 121. 6) STRONG 851 97. 7) 950 121, 123, 139.

are said to represent feather head-dresses. The village is situated half way up the hill Wagira-numu whose summit is crowned by an imposing outcrop of granite. The story has it that a man named Wagira was anxious to raise this summit toward the sky and that he enlisted the aid of one Kobua. Together these two hauled up a number of rocks, but two escaped and rolling down, lodged at the present site of Lohomunidabu. Wagira abandoned his ambitious scheme. Kobua lived here until an affront from his brother-in-law caused him to leave. It appears that Kobua used a hollow stone (still in situ) as a mirror, filling it with water. When Kobua left his home he migrated to the east. After a certain time, however, he returned. It was in celebration of this happy ending that a feast was held. The rock-carvings of Lohomunidabu with their "head-dresses" represent the guests at Kobua's party. WILLIAMS remarks: "We might seize upon the point that the carvings were made on Kobua's return, and that he returned from the east; for other legends do indicate a migration from the east toward the Sogeri region. But perhaps it is not legitimate to select any meaning from a legend which is generally so little to the point"¹). It is worth pointing out however, that the story of the building of a hill to reach the sky is connected with these blocks of stone, that a quarrel caused the two builders to separate temporarily, and that one of the builders, Kobua, used a hollow stone as mirror, which obviously reminds one of the stone bowls of the stone using immigrants, although the stone is said to be in situ here. The immigration to the Sogeri District from the east, to which WILLIAMS alludes, has already been mentioned. WILLIAMS states that, according to a certain tradition, a migration into the Sogeri District took place from the direction of Yovi and Seramina, but he gives no further details. These traditions are all the more important, as WILLIAMS is of the opinion that the petrographs of Lohomunidabu "reveal a certain similarity to those of Boianai. But", he adds, "since we had not yet discovered any connecting links in the wide intervening space it would perhaps be premature to assume that we have at Lohomunidabu the western limit of the Boianai-D'Entrecasteaux stone culture"²). Regarding a comparison of the petrographs of Lohomunidabu with the carved designs of the Boianai stones, we must repeat that the latter are carved megaliths which cannot be indiscriminately classified with petrographs unless it can be proved that both, the petrographs and the Boianai megaliths, belong to the same culture. It must not be overlooked that no anthropomorphs are carved on the megalithic stones of Boianai, whereas it is precisely this pattern which occurs in the petrographs of Bomana, Sogeri and Lohomunidabu (as well as in Buang, Naba, Chimbu District, and Rook Island). On the other hand, WILLIAMS is certainly right in pointing out the resemblance between the petrographs of Lohomunidabu and the neighbouring places, and those of the D'Entrecasteaux Group,

1) WILLIAMS 950 122 f, 129. 2) WILLIAMS 950 140.

since anthropomorphs do occur in the petroglyphs of the latter group. According to WILLIAMS, the relation between the Lohomunidabu petroglyphs and those of Bisiai (Normanby Island) is particularly evident from the fact that "they have one striking feature in common, viz. the rays from the head, which were... interpreted by the people of Lohomunidabu as head-dresses"¹), and it will be remembered that head-dresses were also represented among the anthropomorphic rock-drawings of the Buang. We can therefore accept WILLIAMS's opinion regarding the relation of the petroglyphs of Bomana, Sogeri and Lohomunidabu with those of the D'Entrecasteaux Group, although the mythological evidence on this point is not very well defined. We have no direct mythological proof for the relation of petroglyphs with the megalithic culture. But in the area in which these petroglyphs occur viz: in the D'Entrecasteaux Islands, Rook Island, inland of Finsch Haven, Buang in the Chimbu District and on Boesa Island, we have come across megaliths, characteristic prehistoric objects, the use of sacred plants and certain typical myths, elements which all proved the existence of the stone-using immigrants. Moreover, Lohomunidabu, Bomana and Sogeri lie on the line along which, according to our reasoning, the stone-using immigrants were likely to have migrated when they crossed New Guinea in an east-westerly migration. In these circumstances one might perhaps be inclined to attribute the petroglyphs of New Guinea to the culture of the stone-using immigrants although a more definite answer to this question will only be possible when future investigations have furnished more direct evidence in support of this view. Rock-paintings representing hands, feet, arms, fish, men, crocodiles, etc. were also found in caves on Arguni Island in the MacCluer Gulf²). Rock-paintings representing human beings, heads, hands, etc. were furthermore discovered in caverns on Kei Island³). In view of the strong Indonesian influence in the two latter areas it is probable that the rock-paintings of Arguni Island as well as those of Kei Island are due to Indonesian influence. WILLIAMS reports that he heard rumours of the existence of rock-paintings as far west as the Gulf Division⁴), but nothing definite has been recorded about this up to the present. It is not without interest in this connection that a few rock-paintings representing dancing men were found on Mabuiag in the Torres Islands⁵), and that one of the dancers carries in his hands a drum with a central constriction, a type of drum which was introduced to the Torres Islands from Daudai⁶). But these rock-paintings are quite isolated here.

From this survey the following conclusions can be drawn regarding the New Caledonian petroglyphs—our initial problem: The New Caledonian petroglyphs cannot in any case be traced to New Guinea, since in both

1) WILLIAMS 950 144 f. 2) RÖDER 735 175 ff, 735a 76, KÜHN 444 145 f, HILLE 360 537 f; the conclusions which RÖDER has drawn from a myth associated with these rock-paintings have rightly been criticized by ROWE 749 16. 3) LANGEN 461 408 ff. 4) 950 122. 5) 711 I 60, V 4, 22. 6) 711 I 314 f, V 294 f, VI 185.

regions the subjects represented differ widely, and since rock-paintings occur frequently in New Guinea side by side with rock-carvings, whereas rock-paintings are non-existent in New Caledonia. Moreover, the petroglyphs of New Caledonia cannot have been introduced by the stone-using immigrants, for no petroglyphs exist in the Northern and Central New Hebrides which were touched by a wave of the same stone-using immigrants as those who came to New Caledonia. This latter fact further complicates the problem of attributing the New Guinea petroglyphs to the megalithic culture notwithstanding the few reasons found in New Guinea in favour of such a view. Any connection of the New Caledonian petroglyphs with the few pictographs of Mabuïag is likewise out of the question, first, because on Mabuïag we are concerned with rock-paintings and, secondly, since their antiquity is not beyond doubt. Thus there remain only two possible explanations for the New Caledonian petroglyphs, as well as for some other elements of the New Caledonian culture: either they represent a local creation of New Caledonia or they are due to a relation with Australia, as SARASIN has assumed.

Sacred Plants. SARASIN says clearly that the dracaena is regarded as a sacred plant in New Caledonia. LAMBERT speaks of the sacred dracaenas near the oven in which offerings to the dead are prepared, and PIONNIER also calls the dracaena a sacred plant. In the magic for yams, the seeds are touched with magic stones, whereupon they are set into the earth together with a dracaena leaf. Small yam stones are wrapped in dracaena leaves. It has already been mentioned that cordylines are planted on the park-like lawns "boeweye" near the houses and the altars. On Lifou Island, cordyline terminalis and croton (iueuts) are grown as ornamental plants ¹⁾.

Prehistoric objects. A great number of prehistoric potsherds have been unearthed in New Caledonia at depths varying widely, for instance at 20 inches, 24 inches, 60 inches, etc. below the surface; in the alluvial soil near the Nera River, GLAUMONT discovered three entire pots at a depth of even 20 feet, and Durand mentions pots unearthed at a depth of about 17 feet. A few potsherds were found on Maré Island also, but these were probably pots imported from New Caledonia, since Maré does not possess the necessary material, so that the present Loyalty Islanders therefore have no pottery either. The potsherds are decorated with dot-like impressions, short straight lines, wavy lines, rounded humps, etc. Many of these potsherds were accompanied by primitive stone implements, some of which showed seemingly palaeolithic resemblances, eliciting from SARASIN the opinion that we are confronted here with an older facies of the Neolithic. Unfortunately, as far as I can see, none of the sources of information indicates by which method either the prehistoric potsherds or

1) SARASIN 758 290 f, 299, 756 159 f, NEVEEMANN 616 203, 225, LAMBERT 454 289, PIONNIER 661 32.

the complete prehistoric pots were made¹⁾. By far the most frequent method used in the present-day pottery is the coiling method, and VIEILLARD, DEPLANCHE and GLAUMONT are the only writers to record the use of a certain method of modelling of pots²⁾ which SCHURIG has called "Druck-technik", distinguishing it from the usual modelling method. This method is not known elsewhere in Oceania, so that, according to SCHURIG, no genetic connection can be shown to exist between it and the modelling method³⁾. However this may be, the coiling method is the most usual at present, the pots being decorated with complete human figures or faces with small cylinders representing the eyes⁴⁾. From the fact that all the potter villages are situated in the north of the island, LEENHARDT has quite convincingly concluded that the coiled pottery was introduced by immigrants whose influence was most strongly felt in the northern part of New Caledonia⁵⁾, and SPEISER has shown these immigrants to be the megalith builders who, according to him, came to New Caledonia from the Sepik. SPEISER's opinion is particularly borne out by the fact that the Sepik pottery is likewise not only made by the coiled method, but is moreover also decorated with anthropomorphic designs⁶⁾. SPEISER has drawn due attention to this, saying: "Anthropomorphic decorations are very frequent also on the New Caledonian pots⁷⁾"; and since Sarasin says that the eyes are mostly represented by small cylinders, this little technical detail is also reminiscent of the Sepik where the eyes are represented as very protruding⁸⁾. Now, it is by no means a matter of course that pottery should be anthropomorphic; I should therefore like to emphasize this point particularly and conclude that anthropomorphic coiled pottery was introduced to New Caledonia by the immigrants from New Guinea⁹⁾.

At Koné, and in a cavern in the vicinity of Ouaoûé, SARASIN found remains of clay rings¹⁰⁾ recalling the prehistoric rings of clay which were found in the Bukaua District in New Guinea.

Furthermore, two stone pestles were found in New Caledonia, one near Kanala, the other near Ouaoûé. The first was used in magic by the natives who were ignorant of its origin¹¹⁾. SARASIN expresses the opinion that these pestles were probably imported from Polynesia. There is, however, no foundation for such a supposition particularly as no stone pestles have been found in the Loyalty Islands where Polynesian influence is much stronger. We consider on the contrary that these stone pestles are an

1) SARASIN 756 82 f, 98, 119, 201, 758 2 f, 107-110, Plates 29, 21, 762 247, LEENHARDT 476 30, BERNARD 69 271, GLAUMONT 290, SCHURIG 841 36 f. 2) See SARASIN 758 108 f, with many references. 3) SCHURIG 841 86, see also SPEISER 798 180.

4) SARASIN 758 112. 5) LEENHARDT 479 269 ff, 476 33, 477 81, 152, HADDON in discussion on LEENHARDT 476 282 f, SARASIN 758 108, SPEISER 798 180. 6) See RECHE 707 Pl. XLV. 7) See LEENHARDT 476 32. 8) See RECHE 707 Pl. XLV and fig. 171. 9) SPEISER 798 180 f. 10) 758 108, Pl. 20 fig. 8. 11) SARASIN 758 96, 300, Pl. 14 fig. 12, 13.

additional proof of the presence of the stone-using immigrants in New Caledonia. SARASIN has recorded the occurrence of round or oval "grinding stones" with a plane surface, however¹⁾, so that they cannot be considered as mortars. But GLAUMONT, speaking of Malekula, says²⁾: "J'ai trouvé plusieurs pierres dites cupuliformes semblables à celles que j'avais déjà rencontrées en quelques endroits de la Nouvelle Calédonie". SARASIN and LEENHARDT picture two stones found in the Upper Houailou Valley. These are hollow cylinders of hard stone with carved ornaments³⁾. The natives were totally ignorant of the origin of these stones. A certain number of very fine polished "double daggers" of very hard stone used in magic by the present natives, were found in New Caledonia⁴⁾. Furthermore, a worked stone of a shape recalling that of a sword was found⁵⁾, and also a number of worked flat sword-like stones with handles which were said to have been planted into the earth. These stones were from 12 inches to 22 inches long. Their meaning is unknown⁶⁾. Whether these stones have any connection with the culture of the stone-using immigrants I am unable to show, and I quote this information for what it is worth. The perforated stones of New Caledonia and Tanna⁷⁾ were attributed by SPEISER to his primitive Nambas culture, but he wonders, whether there is any connection between the perforation of stones, the petroglyphs, and the mokmok stones of Arue⁸⁾. To what culture these stones belong is still an open question.

Mythological evidence. The difficulty in tracing the culture of the stone-using immigrants in New Caledonia, is also evident from the myths. In fact, I know of no Caledonian myth where the stone-using people who immigrated in the north of the island are clearly portrayed. According to one tradition, it is the spirits of the dead which created New Caledonia by throwing earth which they carried in a taro leaf, into the sea⁹⁾. Although this is certainly reminiscent of the artificial creation of islands by the stone-using immigrants, it is here the spirits of the dead in general to which this deed is ascribed. This theme occurs on Lifou in the following manner. A noted old warrior ascended a high rock with a long fishing line and large hook. He threw out his line to the west and hauled up the island of Ouvea; he then threw his line out to the south, and drew up New Caledonia. He then cast his line to the east and hauled up Maré. He tried northwards but his line broke, so that he knew nothing of the existence of

1) 758 96 Pl. 14 fig. 11. 2) Quoted by SPEISER 789 95. 3) SARASIN 758 301, Pl. 72 fig. 3, 4, 757 193, fig. 107, LEENHARDT 476 293, fig. 150, 480 15. 4) SARASIN 758 304, Pl. 73 fig. 4, 757 192, fig. 106, LAMBERT 454 295. 5) SARASIN 758 305, Pl. 73 fig. 3. 6) SARASIN 758 305, LEENHARDT 476 29 f, fig. 12 p. 30. 7) See SPEISER 793 38, 210, SARASIN 756 fig. 29, 758 103, 169, LAMBERT 454 145, HADFIELD 331 135. 8) SPEISER 798 186, 190 f, 797 144. 9) LEENHARDT 476 218.

the New Hebrides¹). The occurrence of this theme on Lifou makes it probable that it is due to Polynesian influence, and it is possible that the New Caledonian version goes back to this Polynesian tradition.

A new Caledonian myth narrates the story of a man who went to the sun, but returned to the earth again; another myth tells of a giant who left his footprints on a rock, and a further myth tells of a man who was swallowed by a fish from which he cuts himself out again. "Il était devenu blanc dans le ventre du poisson"²), but nothing else of any interest to us is recorded about these characters. The latter Jonah-like legend is also known on Lifou, Ouvea and Maré, but the character is a woman³). This theme is, however, so widely spread—it occurs in Australia also and has been attributed by GRAEBNER to his totem culture⁴)—that its association with some of the representatives of the stone-using immigrants is probably only of a secondary nature.

According to a Lifou story, a child is kidnapped by two birds and brought to a distant island where it learns of the existence of the coconut. Later, the child returns to its old home bringing with it the coconut which had hitherto been unknown there, and which is henceforth planted⁵). But the story contains no other characteristic feature, and the only detail of interest is the fact that the coconut is said in this story to have been introduced from another far distant island.

According to a Lifou story, a son of the first man Walelimeme went under the earth to the chief of the lower regions from whom he stole a yam; this he brought to the surface of the earth and from that time yams became known⁶). On Ouvea it was said that yams had been introduced to the island from a neighbouring island not so very long ago, but exactly where it came from, or by whom it was introduced is not known⁷). These stories therefore are only of interest to us in so far as they describe the yams as an introduced food plant.

On Lifou, the culture bringer Sine-hnime is known, and is said to have made his appearance near Képénéé. The people of the eastern part of Lifou living in the Natha region are said to be his descendants. Soon after his birth he was able to speak. Sine-hnime taught the people the making of fish traps. Finally he sank into the earth and disappeared. The Natha people asserted that later he came to Thokin as an adult man, where he became the ancestor of a totem group, but other people said that he disappeared for good⁸). The capacity to speak soon after his birth, and the final departure, are features which this culture hero has in common with the culture bringers of the stone-using immigrants. It is therefore im-

1) HADFIELD 331 106, RAY 694 277, MACFARLANE 518 20. 2) LAMBERT 454 18 f., 326-335, 344-346. 3) LAMBERT 454 346 f., HADFIELD 331 254 ff., 288-292. 4) See SARASIN 758 57. 5) HADFIELD 331 228-230. 6) RAY 705 277 f., MACFARLANE 518 17-19. 7) HADFIELD 331 293 f. 8) NEVERMANN 616 220 f., HADFIELD's story recorded in 331 274-278 is probably a variant of this myth.

portant that his name contains the word "Sine" which, in the Polynesian languages, means white, light, or shining. We have already come across this word in the name of the stone-using immigrant Sina-Kwao of Malaita, and it appears moreover in many Polynesian names. But here again we do not know whether this myth forms part of the mythology of the stone-using immigrants who came to this region from New Guinea, or whether it is due to secondary Polynesian influences. The fact that, as far as I know, this hero is not known in New Caledonia itself, supports this latter view.

A Lifou myth of the daughter of the sun who married a man of the earth¹⁾ does not contain anything else of interest to us.

An ogre story known on Lifou shows some resemblances with the many other ogre stories which we have seen to be associated with the stone-using immigrants. The story relates that the ogre Cainyo had killed and devoured all the inhabitants with the exception of one woman and her little son. These two survivors succeeded in preserving their lives by taking up their abode on the top of a high rock. One day, when the boy was alone, the giant came and asked for something to eat. The boy ordered him to open his mouth wide and when he did so the boy dropped into it a number of red-hot stones, causing instant death.²⁾ The flight of the remaining inhabitants, including the father or the brothers, as in the other analogous stories is not mentioned in the present myth, nor does the myth make mention of the miraculous birth of the son.

In another version two brothers flee from the ogre Cainyo to a high tree. They invite the ogre to climb the tree and to take up his position on the branch on which they are sitting, but no sooner did he place his foot on it, than he fell down to the earth, whereupon the boys killed him³⁾.

The following myth of Lifou belongs likewise to this set of ogre stories. There were three orphan children, a little girl, her little brother, and their little baby brother. The girl went on a shell-fishing expedition, but lost her way and came into a region inhabited by demons, "telopi". The demons caught her and kept her for their cannibalistic feasts. The little boy left at home to guard the baby whilst he slept, saw in a vision his dead mother instructing him to visit a certain pool of water and embrace whatever he saw standing up in the middle of the water. In the morning the lad started off and found a tall sapling standing upright in the centre of the pool. He threw his arms around it, when he immediately found himself growing taller and stronger, until in a short time he attained the stature of a man. The baby boy did the same and he too became a full-grown man in this manner. They then started in quest of their sister, taking with them nothing except one ripe coconut. They found their sister, but were shut in a large hut by the demons. Then the two brothers secretly planted the coconut they had

1) See HADFIELD 331 234-237. 2) HADFIELD 331 239-242. 3) HADFIELD 331 283-287.

brought from home, and by singing a song they caused it to grow higher and higher, until it pushed its way through the roof of the house, and as it still continued to grow it bent itself far over the sea in the direction of Lifou. The three prisoners then began to climb its trunk, and reaching the bended part ran for their lives with a whole troop of demons in hot pursuit, until the beach of their native island could be clearly seen. Reaching this, the three of them sprang together from the tree, when the trunk sprang to an upright position, at the same time hurling the demons into the deep sea, where they all perished¹⁾. In these two stories, as in the many analogous ogre stories, it is again brothers, or a group of children, who fall into the hands of the ogre; in the second version the theme of the miraculously quick growing of the hero-child recurs and in both versions the victims flee from the ogre or the demons to a tree, which, according to the second version, lengthened as do the other analogous trees on which many of the stone-using heroes took refuge. In the second version the method of killing is by catapulting the demons into the sky as in the story of Qat who catapulted the ogre Qasavara into the sky after having himself descended from the bending tree. The bending tree has also been encountered in connection with other heroes of the stone-using immigrants. The killing, in the first version, by causing the ogre to fall from the tree, corresponds to the incidents related in the analogous myths of Tanna, Futuna and Aniwa; there Matiktiki and the other analogous heroes let the ogre climb the tree on a rope, and by cutting the rope the ogre falls to the ground and is killed. It has already been mentioned that this method of killing occurs in the similar ogre story of Samoa²⁾; it is therefore significant that this story is current precisely in the Southern New Hebrides, where Polynesian influence is unmistakable, to which influence also the characters Matiktiki, Mauitikitiki, etc. are due. In my view it is most probable that this theme, characteristic in the New Hebrides and in the rest of Melanesia of the stone-using immigrants, was brought by these immigrants to Polynesia from the New Hebrides, and with some Polynesian modifications it must have returned from there to the Southern New Hebrides. Since it is improbable that this theme was brought to Lifou from the Southern New Hebrides, it is doubtless also in Lifou due to the returning Polynesians who have influenced the Loyalty Islands as well as the Southern New Hebrides. On the other hand, it could hardly be supposed that this theme was brought by the stone-using immigrants who arrived in the north of New Caledonia, since it is not recorded in New Caledonia as far as I know. If, however, the uniformity of the myths of the stone-using immigrants in the whole of Melanesia is borne in mind, it is not improbable that this theme likewise formed part of the original set of myths of the megalithic immigrants from New Guinea. Further investigation will perhaps throw light upon the question whether this

1) HADFIELD 331 268-274. 2) Other details also of the first Lifou version agree with the Samoan version; see HAMBRUCH 338 243-246.

theme and other typical myths have been lost or were obscured in New Caledonia, or whether their apparent non-existence in New Caledonia is due to the incompleteness of our present knowledge.

FIJI ISLANDS

Racially, the inhabitants of Viti Levu are for the most part Melanesian, and the Melanesian type is particularly marked among the hill tribes of the interior of the island. Here the skin is very dark and the hair woolly. On the east coast of Viti Levu and the islands off the east coast, the skin is lighter, the hair longer, wavy, and sometimes even straight. This has generally been attributed to Tongan influence, but this opinion is right to a certain degree only ¹⁾. On Vanua Levu, the Melanesian element is predominant also, but a greater number of light-skinned people were observed, especially on the north coast of the island, in the Mathuata region ²⁾. On Kandavu Island, south of Viti Levu, besides the Melanesian element, there are also people with light skin which most authors declare to be due to Polynesian admixture ³⁾, and there is in fact a tradition relating the arrival of Tongan men in Kandavu Island ⁴⁾. The majority of writers speak of "Fiji" in general, without indicating exact localities, and state that racially the people are a mixture of Melanesian and Polynesian elements. In opposing this generalization it must first be pointed out that on Viti Levu, as well as on Vanua Levu, the Melanesian element predominates, and even in the Lau Islands where Tongan influence is obvious, the Melanesian element has by no means vanished. Thus Thompson records that the Southern Lauans "are a brown-skinned people. In general they are lighter than the Fijians and darker than the Tongans, but they vary in skin colour from dark brown which is almost black to light café-au-lait. Light skins, like those of the Tongans... are greatly admired... There are individuals amongst them who closely resemble the mountain people of the interior of Viti Levu where the most negroid types of Fijians are found, and others who look pure Tongan. The Fijian types are found... especially on Fulanga, and the Tongan types in Tongan centers like Lakemba". Although many Lauans have wavy hair, black, frizzy hair is nevertheless the rule ⁵⁾. The cephalic index tallies with these facts. SCHMELTZ and KRAUSE, for instance, give the following values: Viti Levu: 67, 6; Moturiki (near Ovalau) 68,8; Ovalau 69,1; Mango (Northern Lau) 73,2; Oneata (Southern Lau) 74,6 ⁶⁾.

1) WILLIAMS 956 18, 105, THOMPSON 864 18 f, HOCART 363 74, BREWSTER 93 25, 74, 77 f, 83, 91, 182, MASON 537 218, DEANE 183 1, 8 f, PRITCHARD 682a XIV, WILHELM 940 390, ALLARDICK 17 70. 2) MACKENZIE 521 44, DEANE 183 3, ERSKINE 231 241, WILKES 941 III 230 is of the opinion that this is due to intercourse with Rotuma, a view which is also held by HENDERSON 353 51. MASON 537 219 speaks of Tongan admixture. 3) BREWSTER 93 229, HENDERSON 353 51, RÄSSLER 35 213, CALVERT 119 4. 4) FISON 251 19-26. 5) THOMPSON 864 10, 12 f, see also DES VOEUX 182 339, THOMPSON 866 175, HOCART 363 76. 6) 825 550, 552.

But HOWELLS, who studied students of the Mission school at Davuileva on the Rewa River who came mainly from the interior of Viti Levu, found 81.54 for the cephalic index; also in stature, face width and cephalo-facial index the people stand among the Polynesians. Their skin was light although not approaching the Polynesian standard, but in some other characters they resemble the Melanesians ¹). The languages of the whole of the Fiji Archipelago, including those of the Lau Group, are all Melanesian in grammar. The hill-range running from north to south of Viti Levu divides the island into two different dialects, the Low Fijian in the west, and the High Fijian in the east. Whereas the western dialects are mostly Melanesian in vocabulary, the eastern dialects contain a certain number of Polynesian words and these are more numerous still in the Lau Islands ²).

In Viti Levu there are trading relations between the coast and the interior as well as with Yasawa Island, but particularly with Tonga and inter-jacent islands such as Koro Island, the Lau Islands, etc. Tongan intercourse with Fiji probably came about through their canoes being driven westward by strong easterly winds. This occasional intercourse between Tonga and Fiji became regular, especially in the eighteenth century. Thus in the time of Cook's visit in 1777, it had become the custom for Tongan chiefs to voyage to Fiji, and Tongan influence has existed in Lau for at least two centuries. Not a few of the Tongan visitors stayed behind, and thus little colonies of Tongan speaking half-castes established themselves in many of the windward islands; Cook met also Fijians in Tonga. Still stronger are the commercial connections between the Southern Lau Islands and Tonga, and on many Lau Islands, as for instance Lakemba, the Tongan language is spoken. Other cultural traits also spread from Tonga to Lau; thus the Tongan oval houses have superseded the Lauan rectangular houses. Moreover, there are reciprocal relations between the Lau Islands themselves, and they trade also with Viti Levu, Matuku Island, Kandavu Island, etc. In modern times Tonga has gained great influence in Lau through the missionaries; and by the war of the Tongan chief Maafu who, for the first time, armed his canoes with cannons, the Lau Group, the islands of the Koro Sea and the greater part of Vanua Levu came under Tongan power. It was also by the use of fire-arms that Mbau Island subjugated many neighbouring islands, a conquest which was brought to an end by the British annexation of 1874. But we are fully acquainted with these recent developments with which we are not concerned in this study. There are furthermore relations with Rotuma and Samoa; the latter are, however, of a more indirect character through the intermediary of Tonga which trades not only with Fiji but also with Samoa ³).

1) HOWELLS 397 a. 2) HOCART 363 73, 364 43, DEANE 183 97, THOMPSON 864 13 f, RAY 700 16. 3) WILLIAMS 956 2 f, 45, 65, 76, 85, 94, THOMSON 866 22 ff, 52, 281, 288 f, 294 f, LESTER 497 156, HENDERSON 353 32, 51, 91, FINCH 236 167, 404 482, 486 f, DEANE 183 278, ERSKINE 231 180, 293, 452, 456, BRENCHEY 92 172, WILKES 941 198, 234, THOMPSON 862 97 f, 863 112, 864 3, 83, 103, 112, BREWSTER 93 37 etc. etc.

It is impossible to investigate Fijian stone-work satisfactorily until one has thoroughly studied the history of the Fijian Archipelago. Since indications regarding historical events are contained in myths, it is indispensable to anticipate the discussion on the mythological evidence before studying the stone-work, although this is against the scheme followed in this work. The usual view of Fijian civilization is, that the aboriginal inhabitants of Fiji and the Lau Group as well, were a dark, coarse featured, Melanesian race, now represented by the hilltribes in Viti Levu and called the "land people" (*kai vanua*) in the Lau Islands, the latter representing the most eastern expansion of the aboriginal inhabitants of Viti Levu. These aboriginal Melanesians are supposed to have been civilized by later coming Polynesian immigrants. Let us see now who these "Polynesians" really are.

The following story is recorded of Viti Levu. In a distant land to the far westward or north-west there were three brothers, chiefs, Lutunasombasomba, Ndengei, and Waithalanavanua. For some reason they resolved to leave this land with their wives and children, and they sent a messenger to the head craftsman of the carpenter clan, Rokola, asking him to build a great canoe for them which they called the "Kaunitoni". In her the three chiefs set sail, and with them a number of other canoes, as for instance, those of the chief Rokola and his family, Erovu, Nawanggambalambala, etc. all seeking a new land. They found many lands, and at each one some of the people stayed to make it their adopted home; but none of the lands pleased Lutunasombasomba. At last the "Kaunitoni" was left alone. Lutunasombasomba, the leader of the party, had in his canoe a chest of stone in which was stored away "his patterns of work ... and his inscribed words, and many other inscriptions" ¹). — THOMPSON thinks that in this information which was given by an educated native "we detect ... a flavour of the commentator's superior education" ²), and therefore it should be accepted with caution. — Then a great storm came up from the westward and struck the canoe, carrying overboard all their goods, among them the stone chest. For many days the canoe drove before the western gale, but at last they saw high land and beached their canoe. They built themselves huts and called the place Vunda ("Our origin"). This is the Vunda on the north-west corner of Viti Levu. The house built at Vunda they called "Far drifted". The saga goes on to relate the distress of Lutunasombasomba at losing his chest of inscribed stones, and the "meke" song describing this incident runs at follows:

"Lutunasombasomba wept bitterly,
My descendants will be in pittiabie plight,
My basket of stones is overset,
My writings (*vola*) have fallen out."

CAPELL and LESTER have concluded from this song that these "sacred

1) THOMPSON 566 7. 2) THOMPSON 566 7 Note 1.

carvings" "seem to have been patterns of work, for the leader mourns ... that with these things lost, his descendants will grow up ignorant of many lost arts" ¹). But in a Vunda version of this story it is said of this stone chest "that there were in it his family records, said to be carved in stone" ²). From this it is in my view more natural to conclude that these stones were carved monoliths which represented the ancestors. In these circumstances it can easily be understood that their loss brings the descendants "in pitiabie plight" as it is said in the "meke" song.

The legend goes on to relate that the party remained at Vunda, but Lutunasombasomba could not rest for thinking of his stones lost in the sea. So he sent some men in a canoe to seek for them. On their voyage the crew of this canoe discovered the islands Yasawa and Malaki, but the lost records they did not find. When from Malaki Island they sculled to the mainland, they met Ndengei, who had come there to explore the country and who, after having wandered along the coast to Tavua and Nathilau had ascended Mt. Nakauvandra. After this the crew returned to Vunda. When Lutunasombasomba learned that his stones were lost for ever, he was so grieved that from then onwards he gradually became infirm. So Ndengei, who had now taken command of the party, decided to abandon Vunda and to remove to higher ground. He therefore ordered Rokola to build some new canoes to carry them eastward, for the tribe had become too large for the "Kaunitoni". When these canoes were ready the fleet crept along the coast to the eastward, and landed in what is now the bay of Rakiraki. Thence Lutunasombasomba was carried up the mountain, and a hut was built of which the posts, walls and thatch were all made of the vandra or pandanus tree, and it is from this that the mountain took its name of Nakauvandra. Here Lutunasombasomba lived several years, and when at last he felt his end to be near, he ordered his children to separate and settle in different parts of the wide lands. Under these orders Fiji was peopled, and the greater part of the saga is taken up with the wanderings of these children. One of the grandsons of Lutunasombasomba, the chief Mbuitava or Naulumatua went with his people to Vanua Levu, namely to Mbua, Mathuata, and further to Rongavoka. The people of the Nanduri villages and Mathuata Island mention as their founder Ngging-giwangawanga who came from Nakauvandra. Another of Lutunasombasomba's grandsons, Nawangganavanua went with his people to Thakaundrove (eastern Vanua Levu) and Taveuni Island. At his death he became incarnated in a shark who is still venerated by the Fijians. Many of the tribes of south-western Viti Levu trace their origin back to Ndengei and Nakauvandra via Lomolomo which is not far away from Vunda. Thus the tribe Leweilomo, "people of Lomo"—the name is suggestive—in Nandronga says that their original founder Munandra came from Nakauvandra via

1) CAPELL and LESTER 125 324 Note 11. 2) CAPELL and LESTER 125 326.

Lomolomo to Nandronga. Other members of the Ndengei family reached Yanutha Island off the south coast of Viti Levu, and a number of tribes of Kandavu Island trace their origin back to Nakauvandra. The Vusaratu group in Serua at the south coast said that their founder came from the head of the Mba River, i.e. not far from Nakauvandra, and, according to the tradition of the Veivatuloa people of the Namosi Province, their founder came from Nakauvandra via Wainimala River, Wailase River, etc. The founder of Ndeumba village in Serua also came from Nakauvandra, but he wandered widely, namely, over Ovolau Island, Rewa River, and Ndeumba River, until he came to his final settlement. CAPELL and LESTER are even of the opinion that "no Kalou-vou is found who does not emanate from Nakauvandra" ¹). Ndengei remained at Nakauvandra, but a quarrel broke out between him and the twin sons of Waithalanavanua, one of the brothers of Ndengei. In the ensuing war the two fled to Narayamba, the town of the carpenters guild. Rokola, the chief of the carpenters, gave them shelter, but Ndengei pursued them. So Rokola fortified his village. But finally Ndengei was victorious, and Rokola and his skilled carpenters were driven away. They built canoes and sailed down the Rewa River and settled down on the lower river. They are the ancestors of the carpenter clan of Rewa. Traitors found in Ndengei's camp during this war were exiled too, and went to Matailombau and Navosa. The twin sons of Waithala were also driven away. Rokola built them a canoe in which they sailed away. It is believed that one day they will return, and it is significant that in the Messianic movement of 1885, the prophet declared that they had sailed away to the white man's country; the white man wrote the bible about them, but since he was unable to pronounce their Fijian names, he called them Jehova and Jesus.

Without taking into consideration other accounts regarding a certain number of individual and minor migrations, it is clearly evident from these traditions that the immigrants who had their starting point in Vunda, after having swept down the northern coast of Viti Levu and having radiated from Rakiraki across the mountain range, wandered down the two rivers Rewa and Singatoka until they reached the southern and south-western coast; there they peopled Serua, Namosi, Nandronga and Rewa, Kandavu, and some of the other smaller islands off Viti Levu and Vanua Levu were also touched by these migrations ²).

There are moreover other places on Viti Levu where immigrants coming from over the sea arrived. Thus, it is related that the inhabitants of south-western Viti Levu were once on a fishing expedition on the little island Kamba, when they discovered on the coast a "red-skinned youth, very beautiful to behold", trying to hide from them. They received him in a

1) 125 328. 2) THOMSON 866 5, 6-9, 20, 108 f, 133-137, 141 f, 865 344 f, 348, CAPELL and LESTER 125 324-327, 331 f, 335, 341, 239. BREWSTER 93 80 f. ALLARDICE 7 69. DEANE 183 39, 64, ERSKINE 231 225, FISON 251 27-31.

friendly manner, fed him, took him home and gave him one of their girls for his wife. He was said to have spoken gutturally or hoarsely, as the Fijians say the Tongans do. The Fijian word for hoarseness is *ndrong-androng-a*. They learned to speak as he did, and called themselves the people of Nandronga. "By the year 1895" says BREWSTER to whom this record is due, "I had collected the genealogies of most of the leading hill tribes of Viti Levu. In almost every one of them, the then occupant of the chieftaincy was the ninth in descent from the first known ancestor, who in every case was a light-coloured stranger... The greater number of the heroes who became the *kalou vu* or originating spirits of the Singatoka River clans, landed at Tuva in the Nandronga Province... The new arrivals made their way thence to Mavua on the Singatoka River, and then spread themselves out in various directions... One of these adventurers, the demigod who founded the Matakū tribe, erected a row of thirteen stones, each of which he called after a moon, thus providing a record for a lunar year. The place where he lined them out he called the *Tuithake* or the "uprising", otherwise the east. Another placed a large stone in the centre of his village at which malefactors could take refuge... His pursuers would then say to him "Your life is now spared... In making my calculations I have allowed thirty years for a generation. The holders of the chiefly office being the ninth in descent from the first known ancestors, allowing thirty years for a generation, would give 270 years of history. As I made my investigations in 1895, that would take us back to A.D. 1625. A few of the tribes could account for ten generations which would give another thirty years, and make the end of the sixteenth century the dawn of history in Viti Levu" 1).

BREWSTER says that the immigration of Ndengei took place at about the same period. This is corroborated by the fact that it was one of the sons of Ndengei, named Wangatanga, who landed at Tuva in Nandronga, passed through Mavua and established himself at Beimana on the Singatoka River and became the originator of the Ndavutukia tribe. His son, Ndengei's grandson, was called Tui Tonga Levu, which means King of Great Tonga 2). Still higher up on the Singatoka River with the Nandrau people, the chiefs were said to descend from four brothers Talandrau, Naroko, Nandrongo, and Vuanisalusalu. These were men of light colour who came to the island from some other place, landing, according to the account given by RIVERS 3), in Viti Levu Bay on the north-east coast of Viti Levu. But, according to the record which Brewster gives of the history of the Nandrau people, Tui Talandrau departed from Nakauvandra and was one of the followers of Ndengei 4). He mentions nothing of a landing in Viti Levu Bay. However this may be, the name Nandrongo itself indicates that we are confronted

1) BREWSTER 93 73, 78-80, 84. 2) BREWSTER 93 78-82. 3) 725 I 264, 271, II 326.
4) BREWSTER 93 105.

with a group of those light-skinned immigrants who, after their immigration to Kamba Island, founded the Nandronga tribe.

There is a tradition that the first known ancestors of the Noemalu people of the hill country of Viti Levu, were light-skinned and straight-haired men who, with a considerable band, landed at Nggamio on the southern coast of Viti Levu near Serua Island. The name of the hero who led them was Qitatambua, which means the "Sacred Head". (Brewster writes "Nggidhatambo") and apparently he came from a place called Emalu. He made his way up the Navua River, till he reached Muanavatu, a big central tableland. Thence he went down to the Wainimosi, one of the head affluents of the Singatoka. There he settled, and called the place Emalu after the country from which he came. He married women of the country, and his descendants have ever since called themselves the "Noemalu" or dwellers in Emalu. They enthroned one of his sons as their chief, calling him Roko Tui Vuna. (Elsewhere BREWSTER records that this title was conferred upon Qithatambua himself). BREWSTER records that this immigration took place about 1635; but elsewhere he states that in 1895 the ninth descendant of these ancestors occupied the chieftaincies and they already had children. Since BREWSTER's calculations are made on the basis of thirty years for one generation, this immigration must, however, have taken place a little later than 1600.

The people alongside whom the Noemalu settled, is the Noikoro tribe. Their first known ancestor also was light-skinned and straight-haired and, as BREWSTER thinks, in all probability was a follower of Ndengei, as he made his way inland from the western coast near Vunda. He said that he had arrived riding a shark. Here too, in 1895 the Provincial Scribe was ninth in descent from him¹⁾.

The first ancestor of the Vatusila tribe was light-skinned too²⁾.

It is of the utmost importance that we are able quite clearly to follow the migrations of these so-called "Polynesians" even as far as the Lau Islands. LAURA TÜTING (THOMPSON), who thoroughly studied the Lau Islands, has adopted the general view regarding the history of Fiji. She expresses the opinion that in the Lau Islands an aboriginal Melanesian population has been overlaid by immigrants whom she describes as follows: According to the genealogies in the present-day Lau, a very warlike and cannibalistic people settled down in the Lau Islands ten generations ago. These immigrants, who were "Polynesian in racial type and culture", came from Nakauvandra and worshipped Ndengei as their ancestor, as is still the case in the Lau Islands of to-day. The leader of these immigrants was Ndaunisai, that is, one of the sons of Lutunasombasomba, the brother of Ndengei³⁾. The immigrants came to Lau on big double canoes and landed on Kambara and the neighbouring islands Wangawa, Moala, and Totoya

1) BREWSTER 93 86, 100, 94 309. 2) BREWSTER 93 100. 3) Regarding this relationship see CAPELL and LESTER 125 326.

in Southern Lau, but in course of time they spread to the wider Lau Group and established themselves on Lakemba, Naiau, Mothe and other islands. These immigrants married women of the people which TŪTING calls the original "land people". According to TŪTING's opinion, it is quite possible that these immigrants conquered the Lau Islands without fighting, and were, on the contrary, very welcome. The immigrants were sea-farers and warriors, and they erected very strong fortifications consisting of stone walls and defence ditches the ruins of which are still visible to-day (it will be remembered that the carpenter-chief Rokola who immigrated with Ndengei, also fortified his village). The principal weapons of the immigrants were club, spear, bow, arrow, and sling; social ranks, worship of the dead, and the conception of mana were highly developed; chieftainship was highly developed and hereditary, and it was forbidden to touch the head and hair of a chief. (This agrees with the fact that the light-skinned immigrant of the south coast of Viti Levu was called Qitatambua, a name which signifies "Sacred Head"). The immigrants had little temples, the mbure kalou, elevated on stone-flanked mounds, around which fragrant plants were grown. After death the souls of the chiefs go to Thimbathimba, the jumping-off place of the souls on their voyage to the afterworld. Every island has its own Thimbathimba, generally in the west or north-west of the islands, for in this direction lies Thombothombo on the west coast of Vanua Levu, where the soul goes. From there it goes to Ndengei in Nakauvandra, the starting point of the immigrants¹). Thus we may conclude that the migration of these people was via Thombothombo.

From these traditions it follows clearly that all the immigrants of Viti Levu, i.e. those of Vunda, Tuva, Serua Island, and Viti Levu Bay, as do those of the islands off Viti Levu and the Lau Islands, belong to one and the same people; for first, all these immigrations took place at the same time—about 1600 or a little later—secondly, all these immigrants were of light skin or of "Polynesian" character in race, thirdly, they possess the same culture, and fourth: the myths describe some of these immigrants as being kinsmen; thus one of the light-skinned Singatoka immigrants is a son of Ndengei, Ndaunisai, the leader of the Lau immigrants of Polynesian type, is a nephew of Ndengei, etc. facts which at the same time make it probable that Ndengei and his followers were light-skinned also. The common direction from which the immigrants came, as well as their cultural and racial connection, is further corroborated by the fact that, before going to their final place in the west, the souls of all Viti Levu and the contiguous islands, of a large part of Vanua Levu and the Lau Islands, first go to Nakauvandra, the dwelling place of Ndengei²). Thus there is a ghost path which leads from Tuvu on the south-west coast, where the light-skinned Nandronga immigrants landed, along the Singatoka River to Nakauvandra, agreeing

1) TŪTING 900 144-146, THOMPSON 864 20-23, 108 f, 111. 2) THOMPSON 865 341.

with the route along which the light-skinned immigrants went into the interior of the island ¹⁾. On this ghost path pass the spirits of the dead of the southern and western part of Viti Levu on their way to Ndengei ²⁾. Another ghost path leads from Mbau Island via the Rewa Delta, Lower Rewa River, Tholo East, and the Ra Province to Ndengei in Nakauvandra ³⁾. This agrees with the way along which Rokola and his carpenter clan descending the Rewa River went after their expulsion from Nakauvandra.

It has already frequently been found in the course of this study that light-skinned immigrants were considered as recent Polynesians. It might be even easier to fall into such an error in the case of the Fiji Archipelago because of the proximity of the Polynesian islands and the actual Polynesian influences in some parts of the Fijian Archipelago. Thus BREWSTER and THOMSON have considered the light-skinned founders of the Nandronga tribe as Tongans who, according to their view, had been driven to this region by the south-east trade wind; according to BREWSTER, "the whole valley of the Singatoka River is impregnated with Tongan blood" ⁴⁾; and from the fact that Ndengei's grandson, the son of the Singatoka immigrant Wangatanga and son of Ndengei, was called "Tui Tonga Levu" i.e. "The King of Great Tonga" he concludes that this "would seem to point to that country as the place from which these adventurers had come. Perhaps, though they may have come from Samoa". This latter view according to BREWSTER, is confirmed also by the fact that in the Singatoka region a tribe is found called "Savaii" which is also the name of one of the Samoa Islands. Similarly, BREWSTER considers Ndengei, Qitatambua and the Noikoro founders as Polynesians ⁵⁾. There is in fact also a village called "Tonga" on the Singatoka River. But although it is highly probable indeed that the same people who have given the names to these villages and tribes have also named Tonga Island and Savaii, it by no means follows that these people came from Tonga or Samoa; on the contrary, there is nothing to preclude the assumption that the trend of their migration was in exactly the opposite direction, i.e. from Fiji to Tonga. Similarly, the stone-using immigrants of the Admiralty Islands were said to have gone to their mythical island Jap. It might have been concluded in that case also that they went to Yap in Micronesia, but it has, on the contrary, been seen that they came from or via Yap in Micronesia. THOMSON, who himself recorded that the carpenter clan at Rewa descends from the carpenter clan which, together with Rokola, was banished from Nakauvandra by Ndengei, and which descended the Rewa River ⁶⁾ says elsewhere ⁷⁾ that the canoe builders of Rewa descended from Tongan immigrants. This shows that he apparently considers Rokola as a Tongan, and other authors have likewise

1) See BREWSTER's map in 93.

2) SON 865 340 ff, 866 6, 119 f.

3) BREWSTER 93 82, 84, 94 309.

4) BREWSTER 93 42.

5) WILKES 941 207, THOMSON 865 15 f, 22.

6) BREWSTER 93 73, 78 f, THOMSON 866 137.

7) 866 293.

spoken of the Rewa people as being "Tonga-Fiji" people ¹⁾. This however, is just as great an error as the other similar cases mentioned. In fact, among the crafts which the Fijians were teaching the Tongans, MARINER has also mentioned boat building ²⁾. In spite of the fact that Ndengei and his followers landed on the north-western shores of Viti Levu, BREWSTER is of the opinion that they came from Polynesia, and that the south-east trade swept them into Viti Levu through the eastern islands ³⁾. The very fact that, apart from more recent Tongan invasions in the eastern islands no other immigrations coming from the east are known, either in eastern Viti Levu or in islands off its coast, is against such a view. It has, on the contrary, been seen that eastern Viti Levu, Vanua Levu and many of the smaller islands, including those of Lau, were invaded by people coming from Nakauvandra, i.e. in a west-easterly migration.

The view that an immigration came from the east is furthermore contradicted by the fact that the country of the dead belonging to those immigrants with whom we are here concerned lies in the west, where they go after having passed through Nakauvandra, and that accordingly all the "jumping-off places" of the souls face west or north-west ⁴⁾. It is well known that the final afterworld of the Fijians is Bulotu or Burotu far in the north-west beyond the sea ⁵⁾. Buro-tu or Bulo-tu, as the Samoans and Tongans call it, is Buro, Bouro, or Bauro with the suffix tu, signifying "high rank" as THOMSON has pointed out, or "sacred" according to QUATRE-FAGES and HALE ⁶⁾. GUPPY ⁷⁾ expresses the opinion that this Bouro must have been Bauro, i.e. San Christoval, an opinion which has been accepted also by WOODFORD ⁸⁾. Since there is also a Bouro in the Malay Archipelago, THOMSON ⁹⁾ thinks "it is quite possible that San Christoval was named Bouro by emigrants from the Malay Island after their old home, and that San Christoval was a halting place of the race on their journey eastward". On the other hand, I should like to draw attention to the resemblance of the names Bulotu or Burotu with the "Bugotu" of Isabel which, we have learned, was a halting place of the stone-using immigrants of the Eastern Solomon Islands. From the fact that the spirits of the dead go first to Ndengei on Nakauvandra before going to Burotu in the far north-west, it is clearly evident that this afterworld belongs to those immigrants who came from the far north-west and then went to Nakauvandra, one of whose most illustrious inhabitants is Ndengei. Now, if we draw a line from Vunda, the landing place of these immigrants, to the north-west we actually come to San Christoval and Bugotu. It will be seen that the Fijian stone-work and mythology show many resemblances with those of

1) See CALVERT 119 4. 2) IM THURN 873 281. 3) BREWSTER 93 84, 86 f.
4) See BREWSTER 93 84, 287, THOMSON 865 349 f, 866 6, CHRISTMANN 156 11 173,
WILLIAMS 956 239, 243 ff, WILKES 941 206 f, ALLANRICE 17 69 f, THOMPSON 864 82 etc.
5) BREWSTER 93 287. 6) See FISON 251 163, WOODFORD 979 238. 7) 341 277.
8) 979 238 ff. 9) 866 118.

the Solomon Islands, and we shall prove—as is already clear from the data quoted so far—that Ndengei and the other analogous immigrants coming from the far north-west are obviously none other than our stone-using immigrants. From this I actually infer that Bugotu and San Christoval were halting places of the stone-using immigrants on their migration to Fiji. If Bulotu actually means "high rank" this would give additional strength to the view that this place was in fact a halting place of the stone-using immigrants, since we have seen these latter to be the holders of high rank or of chiefly status in Melanesia. Moreover, Polynesian evidence also furnishes a proof that Bulotu was the home or a halting place of the stone-using immigrants. It has already been mentioned that the Polynesian hero Maui corresponds to the Qat-Ambat heroes; this is evident from the fact that he too fished up islands, that he left his footprints behind, that by treading upon the hills he created the plains, that he created food plants and fruit trees, that one of his brothers is called Tanga-loa, that another of his brothers called Hiku-leo had a long tail, etc. etc. Now, according to the Tongan version, the home where Maui dwelt with his sons and brothers, was Bulotu, and it was from there that one of Maui's sons sailed to Tonga, one of the islands fished up by Maui, and from where Maui also finally came to Tonga¹). Whether on their migration the stone-using immigrants, after having left the Solomon Islands, passed through Santa Cruz, cannot be definitely shown, although it is probable. No direct relation is known between Fiji and Santa Cruz; it has, however, already been mentioned that Santa Cruz has trading relations with San Christoval, and that Santa Cruz canoes were driven to Ulawa and Malaita from where the people blown out of their course returned safely to their home in Santa Cruz²).

THOMSON who, as well as BREWSTER, considered these light-skinned immigrants as Polynesians driven to this region from the east, does not in fact deny that the western afterworld points to an original home in the west. He is, however, of the opinion that this conception is due to the immigration of Melanesians arriving at the north-west coast of Viti Levu, and, contrary to BREWSTER, he considers Ndengei as a pure Melanesian³). But the following facts are against such an opinion: Ndengei immigrated with Lutunasombasomba said to be his brother and who is clearly a stone-using immigrant; Ndengei is definitely related to the light-skinned Singatoka immigrants, and it is Ndaunisai, a nephew of Ndengei, who leads the immigrants to the Lau Islands, where these immigrants definitely do not belong to the Melanesian period. Further arguments will be discussed later on.

Nobody has so definitely contradicted the erroneous opinions of BREWSTER, THOMSON and other writers as HOCART who has a completely different

1) FISON 251 139-160. 2) WOODFORD 979 238 ff. 3) THOMSON 866 10, 15, 112.

conception of Fijian history. H. J. ROSE¹⁾, not entirely without justice, has qualified the works of HOCART as "provocative" and this is likewise true of HOCART's opinion which we quote. It might, however, be said in advance that whereas nothing, in my view, could be said against HOCART's opinion, there are quite a number of additional arguments in support of it. HOCART²⁾ says: "The usual view of Fijian civilization is that of a rude or "primitive" aboriginal race overlaid by one or more races of higher culture. An indigenous negroid race, now represented by the hill tribes, is supposed to have been civilized by later coming Polynesians. Fornander is a notable exception, and he has not generally been taken seriously enough. I confess I have found no decisive evidence that the succession of races was that usually held, and not exactly the reverse. If anyone should come along and say: "The civilized folk came first; then the rude negroides came and overwhelmed them", who shall gainsay him? Such things have happened not infrequently, and there are no general principles which can decide one way or the other; particulars alone can decide"³⁾. In fact, even those authors who believe in the chronological priority of the Melanesians emphasize that history starts from the arrival of Ndengei and the other light-skinned immigrants, there being no records prior to their appearance, so that we do not know how early the Melanesians settled here⁴⁾. CAPELL and LESTER, who likewise believe that there were earlier inhabitants before the immigration of the Ndengei people, although the traditions say nothing of them, base this view on the consideration that it is *a priori* unlikely that Fiji remained unoccupied until the end of the sixteenth century. And they think that either this date is wrong or that there were earlier immigrations or that both may be true⁵⁾. It is, however, obvious that such a question can only be answered on the basis of factual or mythological data, and not on the basis of *a priori* considerations. In these circumstances, the information that the light-skinned Nandronga immigrants were received by other people already inhabiting the place, and that Qitatambua as well as the Ndengei immigrants of Lau married the women of the "land people", must be regarded with some scepticism; for all this information is furnished by authors convinced of the chronological priority of the Melanesians, whereas in reality none of the said authors was able to give any positive data regarding these "aborigines".

With regard to the trend of the migrations in the Fijian Archipelago HOCART says: "It is clear that migrations have taken place from the eastern

1) 741 196. 2) 364 42-49. 3) This is actually the opinion expressed by FORNANDER 257 33, 167, quoted also by BREWSTER 93 85, THOMPSON 866 11-13, who thinks that the Polynesians who came from the north-west, left the Asiatic Archipelago between A.D. 150-250, taking Fiji on their way, and sojourned there for some three centuries until they were turned out by the Melanesians. 4) BREWSTER 93 83, 94 309, THOMPSON 864 19, 110. 5) CAPELL and LESTER 125 327.

islands of Fiji towards Tonga and Samoa. The Samoan legends show that these migrations were very important... The greater part of Fiji is ruled by divine chiefs bearing the title Tui. The same title exists in Tonga, Samoa, Rotuma, and Tokelau. Tongan noblemen with the title Tui are known to be of Fijian origin, Samoan gods and chiefs bearing the title Tui came to Samoa from Fiji".

With regard to the cause of these migrations, HOCART believes that it was pressure from the west. And he goes on to say: "In the easternmost parts a few tribes traced their origin back to Na Viti Levu. As we go west in Na Viti Levu we get a unanimity of tribes that place their original home in the hills. If we go to that home, we find it occupied by another tribe which has left its own home higher up in the hands of yet another tribe from higher up, and so on till we are referred back to the now deserted hills of the north coast. These movements began eight or nine generations ago. We may conclude that the bearers of the lost titles of Tui retired to Tonga and Samoa before the tide of an invasion which, starting from the hills of the main island, spread to the easternmost bounds of the Fijian group".

Regarding the question as to who these refugees are, HOCART goes on to say: "At the foot of the great dividing range the people are short, dark, fuzzy-haired, which a deep dent at the base of the nose. As we move eastward they become, as a rule, taller, lighter in colour, the dent of the nose is less marked; wavy, even straight hair appears in the east. The less negroid appearance of the Easterners is usually ascribed to the Tongan invasion which began nearly a century and a half ago, but that will account at most for the physique of the Lauans, but not for the rest of the coastal Fijians. Since the migrations took place from west to east, from a region of more to one of less negroid types, we must conclude that previously the eastern Fijians were even more like their Polynesian neighbours than they are now. That is simple arithmetic; subtract the hill type from the Eastern type; the remainder must be something like the Samoan or Tongan.—Ono is the southernmost island of Fiji. I was told that it was once, not so very long ago, inhabited by "red men", or, as we should say, "copper coloured men". Some called them Tongans, but that is an inference of theirs. This island first became Fijianized when the people of Wadhiwadhi, a Lakemban village, settled there in historical times".

With regard to the language HOCART says: "The daughter of the Tui Lakemba, who reigned in the days when the Levukans came to Lakemba, was named Sina-te-Langi. The name is not Fijian, but pure Polynesian. Sina is the constant name of chiefs' daughters throughout Polynesia, and means "white"; te is the Polynesian article; langi means sky, and is a Polynesian royal title. Tui Lakemba therefore spoke Polynesian, but that Polynesian was not Tongan, since the Tongan article is 'e, not te; nor was it Samoan, since the Samoan article is le. This conclusion is borne out by some Poly-

nesian words which occur in the Lauan dialect, and which are not Tongan" ¹).

Regarding the Fijian crafts and customs, HOCART says the following: "In arts and crafts this people stood much higher than Samoans or Tongans; indeed the Samoans declare that they learned their mat-making and bark-cloth from Fiji ²). Certainly, as far as mat-making goes, they did not learn from the modern Fijian, who turns out excellent mats but cannot produce anything like the fine ones which Samoans and Rotumans excel in... In bark-cloth the eastern Fijians still maintain their superiority". In this connection it is an important fact that, according to Fijian tradition, tattooing was said to have been instituted by Ndengei; and the first woman to be tattooed was Andi (Lady) Vilaiwasa, the daughter of Ndengei ³). Now, Polynesian traditions say that tattooing was known in Fiji before it was adopted in Samoa and Tonga. Two goddesses, Taema and Tilafainga, swam from Fiji to Samoa and on reaching the latter group sang: "Tattoo the men but not the women" ⁴). And it has already been mentioned that boat building was one of the crafts which the Fijians were teaching the Tongans.

HOCART continues: "Polynesian scholars have long ago pointed out that the name of Tahiti is the same as Na Viti; for ta is the Tahitian article, as na is the Fijian, and v appears in Tahitian as h. Hawaiian legends are full of a land called Kahiki, which is not Tahiti. The name of Tawhiti is known to the Maori, and the Hiti were a people who dwelt in Chatham Island before the Moriori dispossessed them. We have therefore to recognize the existence of a Viti people who have found their way to many of the Pacific Islands" ⁵).

But even HOCART gave no definite answer to the question as to who these immigrants, importing a higher culture, really were. From what we have seen in the course of this study, it is obvious that these immigrants are the stone-using people, and this for the following reasons: They are a seafaring people with light-coloured skin who came from the north-west, most probably from Isabel and San Christoval, i.e. from a region where the existence of the stone-using immigrants is clearly manifest; the myths themselves describe them clearly as stone-using people: thus Lutunasom-basomba had a chest of stone containing carved stones which are very likely to have been carved monoliths representing the ancestors; one of the light-skinned immigrants of the Singatoka River erected a row of thirteen stones, which, in BREWSTER's opinion, provided a record for a lunar year, an

1) Rewa and Verata had one common ancestor-god, Ko-mai-nandundu-ki-langi, or Ko-Tavealangi, Reclining-on-the-sky. THOMSON 866 116, which obviously points to connections with the sky. But otherwise I am unaware of any records regarding this god or of any similar conceptions. 2) See TURNER 902 123. 3) BREWSTER 93 82 f., THOMSON 866 218. 4) TURNER 901 182; regarding another, and perhaps more recent, version of the adoption of tattooing by the Tongans from Fiji see BREWSTER 93 83, THOMPSON 864 17. 5) See also DEANE 183 1 Note 3.

explanation which, however needs confirmation; another of these immigrants placed a large stone in the centre of his village, at which, as we have seen, people could take refuge; Rokola, the carpenter chief and follower of Ndengi, fortified his village; similarly the fortifications of the Lau Islands consisting of stone walls and ditches can be attributed to the immigrants who came to this archipelago under the leadership of Ndaunisai, the nephew of Ndengi, and the mbure kalou temples belonging to these immigrants were erected on mounds faced with stones. We shall revert later to some of these types of stone-work.

The heads of these chiefly immigrants are sacred, a conception which is reminiscent of the light-skinned stone-using immigrant "Red-Head" of Malaita who wore a covering on his head and never allowed his hair to be seen. It might further be mentioned that the name of the eastern islands of the Fiji Archipelago, viz. "Lau", (characteristically there is also a village "Lau" on the Wainimbuka River in the vicinity of Nakauvandra) agrees with the name "Lau" of the artificial islands of Malaita; this is certainly not accidental, in as much as the erection of artificial islands seems to have been known in the Fiji Archipelago also. Here again, these chiefly immigrants use bow and arrow as weapons. One of them upon his death becomes incarnate in a shark, and another is said to have come to this country on a shark's back, facts which are in some way reminiscent of the shark cult which, in the Solomon Islands and even as far as New Ireland, we have attributed to the culture of the stone-using immigrants¹). Like so many of the other analogous stone-using immigrants in Melanesia they also went into the interior of the country after their arrival on the coast.

It will be remembered that, according to the view expressed by TŪTING, these immigrants were cannibals. BREWSTER was told in Nandronga that in olden times fighting was unknown in Viti Levu and that a profound peace prevailed. Then strangers arrived and taught the Fijians the art of war unaccompanied at first by cannibalism, but the myth goes on to relate how by chance the practice of cannibalism was later discovered, whereupon it became a custom. According to a myth of the Mba and Nasongo people, famine was the cause of cannibalism²). BREWSTER has likewise identified the immigrating strangers who, according to the tradition, introduced cannibalism with the light-skinned immigrants whom we have shown to be the stone-using immigrants³). But this is quite an arbitrary conclusion. WILLIAMS gives the following important information⁴): "Cannibalism is a part of the Fijian religion, and the gods are described as delighting in human flesh... At one time Ndengi would constantly have human bodies for his sacrifices... This practice was checked in an unlooked for manner. The Chief, seeing the head and legs of a man, who had been cooked... was

1) Regarding shark cult in Fiji, see THOMSON 866 115. 2) BREWSTER 93 72, 74 f.

3) BREWSTER 93 72 f. 4) 956 231.

so disgusted at the spectacle, as to order that, in future, pigs and not bodies should be offered". Here Ndengei is in fact described as cannibalistic; but more important than this is the second part of the myth in which the abolition of cannibalism is attributed precisely to Ndengei, and it is quite possible that the former practice of cannibalism is only mentioned by the myth for the sake of contrast. We must therefore in my view conclude that the stone-using immigrants were not cannibalistic, and I can see no other possible explanation than to attribute the introduction of cannibalism to the later coming Melanesians. The people of Nakello, between the Rewa River and Mbau Island, were, according to JACKSON, peculiar amongst the Fijians in that they were not cannibals¹⁾. It has already been mentioned that traces of the stone-using immigrants were found in this region, and this is further confirmed by the discovery of a tumulus-grave at Nakello. It must not be overlooked, however, that JACKSON is not a very reliable informant, and furthermore that this information is quite isolated. But there is still another argument in favour of our view that cannibalism must be attributed to the Melanesian immigrants. MARINER has pointed out that when COOK visited Tonga Island in 1777 "cannibalism was scarcely thought of amongst them; but the Fiji people soon taught them this, as well as the art of war"²⁾. Now, if it is true that the Melanesian immigrants are the later comers, it can only be they who, at such a recent date introduced cannibalism to Tonga, for if it were introduced by the stone-using immigrants it would have occurred much earlier.

The myths furnish still other proofs that in Fiji we are faced with the same megalithic culture as in the other parts of Melanesia.

Ndengei, who is known in the whole of Viti Levu, a great part of Vanua Levu, the Lau Islands, and many other outlying islands, is worshipped in the form of a large serpent dwelling in Nakauvandra. To him go the spirits immediately after death. In some versions, Ndengei has the head and neck only of a serpent, the rest of his body being of stone. One version describes him as sending forth Rokomoutu³⁾ to create the land. He scraped it up from the ocean-bed, and where his flowing garment trailed across it, there were sandy beaches, and where the skirt was looped up, the coast became rocky. He is the creator of mankind. He hatched out two eggs, from which came forth the first boy and the first girl. When they became hungry Ndengei caused bananas, yams, and taro to grow. He also taught them to produce fire. The two married and their descendants peopled the land. Another version describes Ndengei as giving life to the inferior animals⁴⁾.

1) MOSELEY 583 327. 2) Quoted by BREWSTER 93 72 f, and by IM THURN 873 281.

3) This is his son according to THOMSON 866 134, the son of his brother Lutunasombasomba according to CAPELL and LESTER 125 326, and the son of his sister, according to WILLIAMS 956 219. 4) ERSKINE 231 473, THOMSON 866 133 f, WILLIAMS 956 217, 251 f, WILKES 941 206, CHRISTMANN 156 II 173 f, HENDERSON 353 84 f, TREGAR 897 182.

One of the principle arguments which FORNANDER has advanced to support his opinion of a longer sojourn of the Polynesians in Fiji, is the serpent worship in the serpent form of Ndengei, which, according to him, proves that Ndengei was a Polynesian¹). This opinion has been contradicted by several authors; thus THOMSON says that the serpent nature of Ndengei "is a modern gloss, and even if it had been ancient, it would have proved no connection with the Polynesians, since snake-superstitions are common throughout Melanesia"²). This is likewise the opinion of BREWSTER³). THOMSON is therefore of the opinion that "Ndengei was a purely Melanesian deity", "which undoubtedly belonged to the aborigines, and was adopted by the conquerors", and that accordingly the whole of FORNANDER's argument of an early settlement of the Polynesians in Fiji comes to nothing⁴). CAPELL and LESTER⁵) are also of the opinion that Ndengei is pre-Nakauvandra and that the present-day story is a combination of two traditions. It has already been mentioned that HOCART accepted FORNANDER's opinion that the Melanesians were the later immigrants, and we shall give a further argument in favour of this view later on. For these very reasons the presumed association of Ndengei with the "aborigines" must be accepted with caution. It is of course possible that the Ndengei myth is an amalgamation of two different myths, but these do not belong to two different periods or ethnic groups, but are both characteristic of the stone-using immigrants. That Ndengei, the immigrant of Vunda, is a representative of the stone-using people has already been shown. The conception of the culture-bringing snake has also been found in this study to be extremely characteristic of the stone-using immigrants and in this respect FORNANDER had a much clearer insight than any of the other writers. As in the numerous analogous cases, so here again the culture-bringer snake dwells on a high mountain and here, too, it is associated with the spirits of the dead. It is moreover highly significant that this Ndengei-snake is partly of stone, that it is the creator of mankind and particularly the introducer of food plants as were almost all the other heroes of the stone-using immigrants; and it is remarkable that the incestuous union of brother and sister appears again in this story. Finally, the creation of the land by scraping it up from the ocean-bed is the typical description of the creation of an artificial island so extremely characteristic of the stone-using immigrants. It is therefore not only the serpent nature of Ndengei but many other reasons also which lead to the conclusion that Ndengei is a representative of the stone-using immigrants.

The idea of the creation of artificial islands is in fact not unfamiliar in the mythology of this area as is evident also from the following story recorded on Kambara Island in the Southern Lau Group. When the great

1) FORNANDER 257 44, 167 f. 2) THOMSON 866 16 f, 134. 3) See 93 85.

4) THOMSON 866 112, 134. 5) 125 326.

forefather god of the Kambara people arrived, he looked over the whole island and saw nothing but rocks. So he went to steal a piece of land from the islands of the Lau group, but each island was guarded by its own forefather god. Finally he arrived at Vatoa. The forefather of this island was asleep. So the god of Kambara dug up a piece of land. A spring gushed forth from the hole. He put the land into a basket and took it to Kambara. When he arrived he found the people of Kambara had baked a piece of land he had previously stolen and made it useless for gardening. He was very angry and placed the land from Vatoa on the side of Kambara (instead of in the middle as on the volcanic islands). On all Kambara this is the only garden land¹). This myth does not in fact actually describe the creation of an island; but in the Lau Islands of Malaita also it has frequently been seen that natural rocks in the sea were completed by the addition of humus, and on the rocky island which arose from the giant clam, Ambat emptied good soil to make it habitable.

The theme of the creation of islands occurs also in an Ono Island myth. It will be remembered that red-skinned people are found on this island. HOCART, notwithstanding the general opinion, has expressly emphasized that these people are not Tongans, so that they cannot but be light-skinned stone-using immigrants, traces of whom are so manifest in Viti Levu. The Ono myth runs as follows: On the face of a cliff in the island of Ono, there is a gigantic footprint four feet long and more than a foot wide. The indent of the great toe is almost perfect, and the whole appearance is suspiciously like the handiwork of man. On the face of a cliff upon the opposite shore in Kandavu, there is another footprint, also gigantic in scale. These two marks were said in olden times to have been made by Tanovu, a clan-leader in the days of immigration. The legend goes that the strait between the islands of Ono and Kandavu was not wide enough to allow Tanovu to dip the great "Kitu" water-pot into the sea. He therefore placed one foot on Ono and the other on Kandavu, pushing them apart till the passage became three or four miles in width, that he might with ease dip his enormous pot into the water. The central part of Ono was much lower than Mt. Nambukelevu of Kandavu. There dwelt on Mt. Nambukelevu a spirit called Tautaumolau. Tanovu, being jealous of the high mountain, resolved to build up a mountain in the centre of his own island (the mountain is now named "Nggilai Tangane"). So he made a furtive descent upon his enemy's mountain. Once there, he began to dig out the earth from the crest of it, and to fill his huge basket. Tautaumolau saw him whilst he was thus engaged and made all haste to save his ancient home. Then Tanovu took his basket of earth and fled before his foe. The chase followed partly along the great southern reef, and partly along the spirit path of Kandavu. And in the zigzag running much earth fell out of Tanovu's basket,

1) THOMPSON 864 4.

forming the many islands now dotting the lagoon within the reef on the ocean side of Kandavu. The chase continued even as far as Solo. The dropping of earth continued. Hence we have the island of Ndravuni, and the rest of those islets to the north-east of Ono. But Tanovu arrived at last at the end of the reef. At Solo he cried out: "Turn, you sons of Ono". And the battle turned once more towards Kandavu, Tanovu this time being the pursuer, but not before Tanovu had dropped his basket at Solo; and so we have the circular reef and the rock in that place. In Kandavu, Tanovu was finally victorious. There are to be seen to-day the footprints of Tanovu's feet and the mark of his spear, and his army are a number of rocks. Near the army there are two conical mounds. These are the ovens which were in the process of baking whilst the army kept watch. The legend is that one had been opened. The food was properly cooked. But before the second was ready, the fight came swiftly and interrupted culinary operations. The oven in which the food was cooked was filled with yams, taro, and the rest of the edible roots and fruits of Kandavu and Ono; that is why they are edible at the present time. The other oven was filled with many kinds of roots and fruits which, being uncooked, have become the poisonous roots and fruits in the island to this day. The "Sangga" (pot) of Tanovu is a rock near Leweti, and is peculiarly like a Fijian sangga. On the ocean-side of Ono stands another rock; this is Tanovu¹).

Although it is stated in the myth that Tanovu was "a clan-leader in the days of immigration" which seems to imply that he was an immigrant himself, the myth records nothing regarding his connection with those other immigrants whom we have qualified as the megalithic people. That Tanovu also is a stone-using immigrant, however, is evident from the fact that he left his footprints, that by pushing the islands Ono and Kandavu apart and by building up his mountain he is a physiographical shaper, and from the further fact that he is the creator of many islands and reefs; it is due to him that certain food plants are edible, which may well be but a modification of the usual theme of the introduction of food plants by the stone-using immigrants; and it is highly significant that he is in possession of a pot, since in Ono and Kandavu Island coiled pottery is made²).

Fijian stone-work: The best known type of stone-work in Fiji is the frequently described Nanga. The Nanga, which means "bed", are stone-enclosures, i.e. a rough parallelogram formed out of flat stones embedded endwise in the earth. Their dimensions differ; for example some are about 100 feet long by 50 feet broad, others 42 feet long by 21 feet broad, etc. They are lying east and west, though the orientation is not exact. The upright stones forming the walls are from 18 inches to 3 feet in height.

1) DEANE 183 47-56. 2) Regarding another myth describing the original position of Ono near Ongea from where it was pushed by a woman of Lakemba to its present position, see WILLIAMS 956 15 Note.

They do not always touch. At the east end there are two pyramidal heaps of stones with square sloping sides and flat tops, 9 feet square at the base, 5 feet high, and 4 feet by 6 feet on the top. These are altars on which offerings were laid. The narrow passage between them is the main entrance to the enclosure. Two similar pyramids placed about the middle of the enclosure divide it roughly into two equal parts, with a narrow passage connecting the two. The western portion is the Nanga-tambu-tambu (the Holy of Holies), the eastern the Middle Nanga. According to BREWSTER ¹) and VOLLMER ²) a small Mbure Kalou or temple was built in the Holy of Holies; but the drawing of a Nanga made from the data furnished by FISON and JOSKE shows this temple outside the Holy of Holies and beyond the western side ³). There is another entrance in the middle of the west end, and there are gaps between the upright slabs of the northern and southern sides every 6 or 8 feet to permit the people to leave the enclosure informally during the rites. The interior of the Nangas was a smooth lawn and all around were useful, ornamental, and fragrant shrubs and trees such as candle-nut, red dracaena (*vasili ndamundamu*) etc. The Nanga stone structures are to be found among the Noemalu, Noikoro, Nuyaloa, Vatusila, and Mbatiwai tribes, which inhabit the headwaters of the Wainimala, Singatoka and Navua Rivers in the interior of Viti Levu. The following are villages in which Nanga structures have been found; Navosa on the Upper Tuva River west of Mavua (Middle Singatoka); three Nangas were found on the south coast between Serua and the Singatoka River—one near Vunaniu for instance—other Nangas were found in Narokorokoyawa the chief place of the Noemalu District, and in Wainamu (Noemalu tribe) which is quite close to Narokorokoyawa. The first Nanga was built at Vitongo on the north-west coast of Viti Levu ⁴). The Nanga is thus confined to a comparatively small area in the west and the centre of Viti Levu, i.e. what HOCART calls the area of the Low Fijian tribes. Beyond this area it is unknown ⁵).

JOSKE is of the opinion that "these tribes, though in the main of Melanesian appearance, yet in dialect and customs show decided Polynesian traits" ⁶). This has, however, been contradicted by VON HÜGEL who says: "My impressions during some weeks stay in 1875 at Narokorokoyawa, the capital of the Nuyamalo District, do not coincide with this statement, as the inhabitants, with few exceptions, seemed to me to be typical Melanesians". THOMSON also says of these tribes: "They are of Melanesian type, and

1) 93 96. 2) 912 342 f; it is, however, probable that VOLLMER did not himself see the Nangas, for he speaks of them as being stone circles. 3) In the Nangas on the south coast the two truncated pyramids near the entrance are missing. 4) For this see the chapter on the mythological evidence. 5) FISON 249, JOSKE 421 254 ff, fig. 1 p. 255, fig. p. 257, THOMSON 866 146 ff, BREWSTER 93 94 ff, fig. p. 97, VOLLMER 912 342, RIVERS 725 I 280, HOCART 363 74. 6) 421 256 Note 6.

have fewer traces of Polynesian admixture than the coast tribes" ¹⁾. This information agrees with the data regarding the racial characteristics previously quoted by us and from which it was evident that the Melanesian type generally prevails in the western part of Viti Levu.

In the Nanga a secret cult was celebrated, called Mbaki, that is "Year" or "Crop". The Nanga was the "bed" of the ancestors, that is the spot, where their descendants might hold communion with them. The Mbaki were the rites of initiating the youths, presenting the first fruits, healing the sick, or of winning charms against wounds in battle. Beyond the west end of the Nanga near Vunaniu two old graves were found. "It is possible

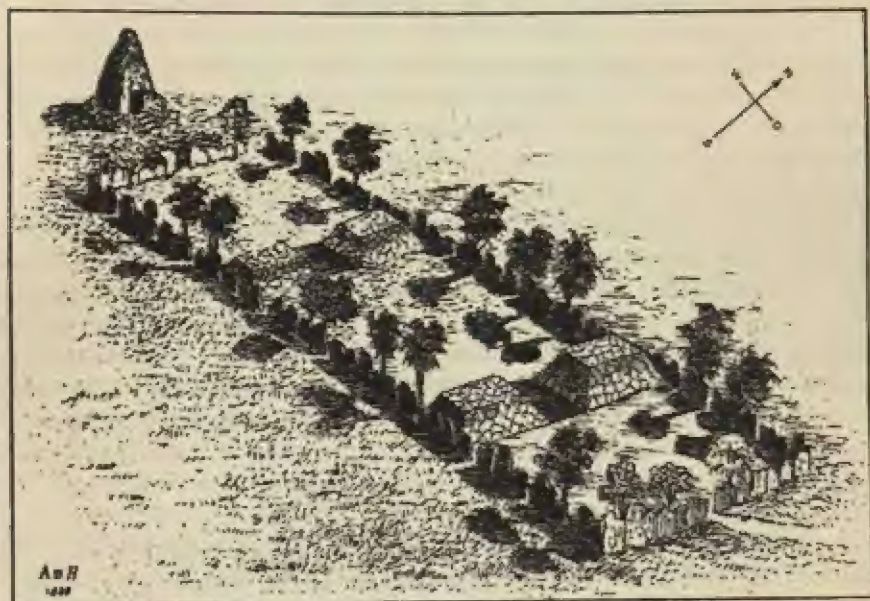


Fig. 23. Nanga stone enclosure, Viti Levu. (After Fison and Joske).

that chiefs were buried near the Holy of Holies of all the Nangas", says THOMSON ²⁾. There are two varieties of the Nanga cult differing slightly from each other, the Veisina and the Rukuruku sects, called after the names of their respective introducer. Both groups used the same Nanga, but were forbidden to reveal their mysteries to each other. The great annual festival was the initiation of the youths. This ceremony was held in the season of yam planting. When the novices were led into the Nanga, a man blew upon a carved staff bored in its upper end, producing a shrill whistle-like sound, and by a bamboo trumpet immersed in water a booming sound was produced. In the Nanga they had to crawl over seemingly dead bodies, i.e. men, who played the part of the dead ancestors, but who after

1) THOMSON 866 149. 2) 866 149.

that suddenly started up and ran away. For several days the boys were secluded in the Nanga under feasting and kava drinking. In a later ceremony also the women came to the Nanga and prayer was said to the ancestors that they might be blessed, with ample families, after which temporary promiscuity seems to have followed. One Nanga, which THOMSON visited, "had not been used for twenty-eight years... and about the walls were strewn a number of the curious funnel-shaped cooking pots that were only used during the Nanga celebrations"¹). According to JOSKE also "along the line of stones, every here and there, earthenware bowls were placed which contained the different sorts of paints required by the votaries to anoint their bodies with during the performance of the mysteries"²).

Many writers have drawn attention to the similarity of the Nanga cult with the other secret societies of Melanesia, instancing the communion of the members with the dead, the playing of flutes, etc.; but on the other hand it cannot be overlooked that the cult differs in some respects from the other secret societies of Melanesia, as for instance in admitting the presence of women³).

We shall here add the mythological record of the introduction of the Nanga. Long ago two little black-skinned old men, called Veisina and Rukuruku, drifted across the ocean from the west and passing through the Yasawa Islands, they landed at Vitongo on the north-west coast of Viti Levu. Veisina, who landed first, fell into a deep slumber, and slept till the coming of Rukuruku. From the spot where Veisina lay sprang turmeric, and from Rukuruku's footsteps sprang the candle-nut, and therefore the followers of Veisina smear themselves with turmeric, and the followers of Rukuruku with the black ash of the candle-nut when they go to the Nanga. After their arrival the two old men went to the chief of Vitongo asking him to divide his men between them that they might teach the men the Mbaki. The chief granted their request, and gave them a piece of land on which to build their Nanga. There they built it and called the place Tumba-levu. It is the descendants of the men to whom these two little black-skinned old men taught the mysteries of the Nanga who practise it to-day. When they left their home and travelled eastward they carried the mysteries with them. "The Wainimala tribes can name six generations since they settled in their present home, and therefore the introduction of the Nanga cannot have been less than two centuries ago. During that time it has over-spread one-third of the large island", says THOMSON⁴). Regarding the history of those people who have the Nanga, THOMSON records that "all these tribes have spread east and south from a place of origin in the western mountain

1) THOMSON 866 156. 2) JOSKE 421 258, 267 ff, THOMSON 866 146 ff, BREWSTER 93 94, VOLLMER 912 342. 3) See RIVERS 725 II 232, THOMSON 866 149, JOSKE 421 256, CORBRINGTON 160 72 etc. 4) THOMSON 866 149 f, BREWSTER 93 94, JOSKE 421 258 f, HADDON 711 VI 45 f, FISON 249 14, 17, RIVERS 725 II 231 f.

district" ¹⁾). It might be mentioned in this connection that the name Rukuru occurs as a village name also east of the Nanga region, as for instance, on the Upper Rewa River, Viti Levu Bay on the north-east coast, the north-west coast of Ovolau Island and on the west coast of Vanua Levu.

The myth relating the introduction of the Nanga shows that we are confronted with sea-faring stone-using immigrants who came from the north-west as did also Ndengei and his people. They introduced certain plants although not for food, and similar to the other stone-using immigrants of Fiji they are apparently of relatively recent date. If the funnel-shaped cooking pots strewn about the walls of the Nanga were used during the Nanga rites only, may we conclude from this that there is a genetic connection between this type of pottery and the Nanga? We have no proof for such a supposition, nor are we told by what method these pots were made. This latter point would be of particular interest, since both the coiling method and the modelling method are used in Viti Levu ²⁾.

It is, however, in complete contradiction to everything we have observed up to the present that the introducers of the Nanga are said to have been black-skinned. JOSKE and BREWSTER have in fact recorded nothing regarding their physical appearance, but FISON and THOMSON state that they were black-skinned, and we have no reason to doubt this information ³⁾. It is not easy to form any judgment regarding the Nanga as a type of stone-work, and its relation to the other types of stone-work in Melanesia. The Fijian Nanga at first glance seems to be reminiscent of the stone-enclosures of the Trobriand Islands, but there are differences of construction, size, and probably function, and in the Trobriand enclosures no pyramids occur, so that a comparison is not possible. Many authors have of course emphasized the resemblances of the Fijian Nanga with the Polynesian Marae. But HOCART, mainly on the basis of linguistic arguments, has attempted to prove that the Polynesian Marae corresponds to the Fijian "rara", i.e. the village green on which feasts were held and offerings made, rather than to the Nanga ⁴⁾. Of Undu village, Tholo East (at the point where the Wailoa River and the Wainimala River join), BREWSTER records that "the village square had a large banyan tree in the centre surrounded by a broad platform of stones about three feet high like the chabutra of Indian rural life" ⁵⁾, but this is not confirmed by any other author as far as I can see, nor do I know of anything similar in the rest of the Fiji Archipelago. The rara is generally planted with short grass and fringed with brilliantly

1) 866 149. 2) See SCHURIG 841 77, 85 f, with many references. 3) The name Veisina reminds one of the Polynesian word "sina", "white", but BREWSTER, discussing the name Veisina, says that "sina" means the native spear grass used for the support of the yams, for torches, etc. and that Veisina is but the plural of sina. BREWSTER 93 82, 95. I cannot see any relation between these things and the personality of Veisina, but I am not prepared to discuss this explanation. 4) HOCART 370 458 ff. 5) 83 280.

foliated plants ¹⁾. HOCART has drawn attention to the following meaning of the word marae given by TREGAR in his *Comparative Dictionary of Maori*:

- Maori: An enclosed place in front of a house.
 Samoan: An open space in a village.
 Tahitian: The sacred place formerly used for worship, where stones were piled up, altars erected, sacrifices offered, prayers made, and sometimes the dead deposited.
 Hawaiian: A calm place in the sea.
 Tongan: A green.
 Mangaian: The sacred enclosure.
 Mangarevan: Sacrifice, first fruits.
 Paumotuan: A temple.

And in Wallis Island and Rotuma the meaning is the same as in Samoa and Tonga ²⁾.

Other examples can be added from such regions of Melanesia in which either Polynesian influences or influences of the stone-using immigrants were seen to exist; thus marae is the name given to the dancing ground of Tikopia, where a number of upright stone slabs representing the seats of the clan deities stand near the chief's house; in Ontong Java the dancing ground is likewise called marae ³⁾; on Tasman Island it is called malae ⁴⁾; on Futuna Island in the Southern New Hebrides, offerings are carried to the "marae" of the Tongan god Maisiki ⁵⁾ and the dancing ground of Tanna Island is called marum ⁶⁾ which is perhaps only another form of the word marae.

These data show that the word marae in Polynesia, as well as in the border area of Melanesia influenced by the Polynesians, has a wider meaning, and denotes stone-enclosures as well as dancing and ceremonial grounds. Now, it has been seen that stone-work was erected, sacred plants grown, sacrifices offered, the dead, and particularly dead chiefs buried, and the chief's house, men's house or temple built on many ceremonial and dancing grounds of Melanesia, of which the park-like dancing grounds of New Guinea are but one particular form. It followed therefore that we were obliged to attribute many of these dancing grounds to the culture of the stone-using immigrants. If we accept HOCART's conclusion that "Clearly if the rara represents the marae, the nananga cannot" ⁷⁾, is it then permissible also to conclude that: if the rara is megalithic, the Nanga is not? This would certainly seem to be a paradox, and even HOCART is of the opinion that "the common origin of the marae and the nananga probably lies a long way back in history" ⁸⁾. HOCART has shown that the village green and the Marae belong to the cycle of the divine kingship. But divine chiefs do

1) BREWSTER 93 44. 2) HOCART 370 457 f. 3) PARKINSON 632 205, HOGGIN 387 207. 4) HOGGIN 387 214. 5) GILL 286 177 f. 6) BRENCHLEY 92 210. 7) HOCART 370 459. 8) HOCART 370 461.

not appear in any of the accounts of the Mbaki festival, and the area covered by the Nanga is precisely that where the divine kingship is weakest. From this HOCART has concluded that the Nangas were certainly not connected with divine kingship, "and I should be inclined to say", HOCART says "that the Mbaki worshippers are precisely the people who broke down the institution" ¹⁾. That there is a difference in the social organization between the two principal ethnic groups of the Fiji Archipelago has been shown also by TÜTING-THOMPSON in her analysis of the culture of the Lau Island. TÜTING is of the opinion that a kind of gerontocracy is characteristic of the Melanesian period, and that the divine kingship is typical of the Ndaunisai immigrants ²⁾ whom we have seen to be the stone-using immigrants. Her opinion differs from HOCART's only in that she conforms to the usual view of a chronological priority of the Melanesians. HOCART's opinion expressed in other words would mean that the Melanesians who, according to him, are the later coming immigrants, introduced the Nanga and broke down the institution of the divine kingship of the earlier arrivals, the light-skinned stone-using immigrants. This opinion is actually confirmed by the information which Tüting gathered in the Lau Islands. Although the Nanga does not exist in this archipelago "the old land people (i.e. the Melanesian inhabitants of the group) say that in olden times they possessed a secret society called Nanga, about which the women were forbidden to know anything whatever". The native informant was ignorant of the purpose of this society but, as Tüting adds "it is by no means impossible that this institution is actually related to the Nanga, a secret society regarding which Fison has given information" ³⁾. If, thus, it is the Melanesians who brought the Nanga, this explains why its introducers were black-skinned, and why, in the Mbaki rites, features of the general Melanesian secret societies occur. This is the only occasion, as far as I know, where we learn of black-skinned stone-using immigrants in Melanesia, and it is significant therefore that among the various types of stone-work in Melanesia the Nanga is actually entirely isolated and peculiar ⁴⁾. We are thus faced here with a problem which, because of its singularity, cannot be solved on the Melanesian evidence alone. Perhaps future investigations will throw more light upon this question. But, for the time being, HEINE-GELDERN's opinion ⁵⁾ that black-skinned Melanesians during their migrations picked up the habit of constructing stone enclosures—a habit foreign to their original culture—and that they combined this habit with the ceremonies of their secret societies, is still the most probable explanation.

With regard to the arrival of the Melanesians in the Fiji Archipelago,

1) HOCART 370 459 f, 369. 2) 900 142, 145. 3) TüTING 900 143. The fact that the women also took part in the Nanga cult of Viti Levu is certainly not a serious contradiction to the present statement, since the Lau informants had no longer any definite knowledge of this cult. 4) Only on Rossel Island has the stone-using immigrant Mbasi also been described as dark-skinned, but it has been seen that this statement was not very definite, so that we can disregard it. 5) 350 300.

it has already been mentioned that the Wainimala tribes who also have the Nanga, came to their present home six generations ago. THOMSON, who records this in his work published in 1908, infers that "therefore the introduction of the Nanga cannot have been less than two centuries ago". On the other hand, it has been found on the basis of a greater number of generations that the light-skinned stone-using immigrants came to Viti Levu about 1600, i.e. an earlier date than that of the arrival of the Nanga introducers in the Wainimala region. This would actually support the opinion of Hocart and Fornander that the Melanesians came later than the light-skinned immigrants, although it must not be overlooked that we are unable to gather from the Wainimala tradition how long the Nanga introducers remained on the coast, and how long they took to penetrate from the coast to the Wainimala region in the interior.

The Fijian houses are built upon an artificial mound of earth, or of coral stones, or the earth mounds are faced with stones or stone slabs. Whereas the ordinary houses have mounds of about 6 inches or 1 foot high, the foundations of the chief's houses are higher, reaching from 3 to 10 feet; those of the Mbure are the highest of all, sometimes being terraced and forming double superimposed platforms, from 10 to 20 feet in height altogether. The foundations are rectangular, but on Vanua Levu a square, and a few round foundations were found. It is not easy to indicate the exact distribution of these house mounds in the Fiji Archipelago, since the earlier writers particularly speak frequently of "Fiji" without indicating the precise locality. From the literature consulted I know of the following regions where house foundations were found: western Viti Levu, the mouth of the Mba River (north-west coast), Rakiraki (north coast), Nasongo tribe (an inland tribe in the north), Rewa River, Mbau Island, Levuka, Ovoulau, several villages on Vanua Levu as, for instance, Ngalea, Namoka (Dreketi tribe), Nambuna, Seanganga, Nateva Savana, on Taveuni Island and finally in the Lau Islands Lakemba, Kambara, etc. etc.¹⁾

It has been seen that the Mbure Kalou elevated on stone flanked mounds in the Lau Archipelago were attributed by Tüting to the Ndengei stone-using immigrants. If the house mounds as indicated by us correspond approximately to their actual distribution, it would be evident that house mounds cover an area quite different from that occupied by the Nanga, and that at no point do they intrude into the area of the Nanga. The Mbure already mentioned, which JOSKE, in his drawing²⁾ of a reconstructed Nanga,

1) FISON 248 146, 250 406, 251 Pl. 27, 28, BRENCHLEY 92 157, MARTIN 535 336, ALLARDICE 17 70 fig. 1, FETTERICH DE TOLNA 234 Pl. p. 169, WILLIAMS 956 221, fig. p. 222, THOMSON 866 Pl. p. 70, CHRISTMANN 156 11 fig. p. 149, 174, BÄSSLER 35 218, 251, THOMSON 864 66, 863 650, ERSKINE 231 168 f, 185, 430, WILKES 941 194, 219, FORBES 256 183, MOSELEY 853 309, 316-318, BREWSTER 93 Pl. p. 64, 176, ROUCHIER 747 fig. 12 p. 1005, fig. 13 p. 997 DES VOEUX 182 11 41, HOCART 373 192 f, 367 447, HORNELL 397 25, 30, fig. 3 p. 30-31, MARZAN 536 88, 96. 2) 421 255.

pictures outside the Nanga, is in fact shown as standing upon a mound, but I know of no other source of information mentioning these house mounds in the Nanga area or in any direct connection with the Nanga itself. On the other hand, the house mounds are frequent in those districts which we have seen to be the principal dwelling places or temporary stations of the light-skinned stone-using immigrants, and from this we must conclude that house mounds in Fiji belong to the megalithic culture as they do in the rest of Melanesia.

At many places in the Fiji Archipelago, fortified villages were found. These villages are surrounded by stone walls in front of which deep, wide ditches were dug and sometimes partly filled with water. The earth dug out was thrown up to form embankments between the wall and the ditches. These earth embankments, varying in height between about 3 and 12 feet, in some cases were faced with stones. In some cases there were double or triple moats with earth-work between followed by a stone wall; in other cases there were only earth embankments and moats without the stone walls, and there is great variety in these fortifications. The houses were built within these fortifications.

Here again, it is difficult to give exact indications of the distribution of these fortifications, since earlier writers record them from "Fiji" in general without precise indication as to the localities. From the literature consulted I know of fortifications in the following districts: THOMSON says that almost every important hill top in Western Viti Levu possesses these fortifications, but he does not mention localities; fortifications are furthermore found on Vatulele Island (off the southern coast of Viti Levu), and Malaki Island (off the northern coast of Viti Levu). Of Namboutautau village on the Upper Singatoka River, GRAEFFE¹⁾ records that it was "verschanzt", but he gives no details regarding the character of these fortifications. Fortifications were furthermore found in many villages of the Rewa River, in Lase-Lase village (Navua River District), many villages of Ovalau Island, and on Vanua Levu they occur in Mathuata, Koro Navuta Mountain, Naduri, Dreketi River, Nateva Matua, Nateva Savana; they were furthermore found on many Lau Islands as Lakemba, Kambara, Wangava, Mothe, and Fulanga²⁾.

It has already been mentioned that Rokola, who immigrated together with Ndengei, was the constructor of fortifications, and in the Lau Archipelago, TÜTING has likewise attributed these fortifications to the culture of the Ndengei stone-using immigrants. Now, although the data we have compiled cannot perhaps claim to be complete it is evident that the distribution of these fortifications is very similar to that of the house mounds, that is to

1) 302 68. 2) MOSELEY 583 309, 326 f, GRAEFFE 302 67 f, 301 32, ERSKINE 231 168, 216, 429 f, 459 f, THOMSON 866 91 f, THOMSON 871 28 f, 39, 42, THOMPSON 863 109, BREWSTER 93 265, SEEMANN 768 360, CHRISTMANN 156 II 171, WILKES 941 205 f, 241, WILLIAMS 956 48, TÜTING 900 144, LANJUS 462 270, CAPELL and LESTER 125 336-338.

say, it corresponds closely to the routes followed by the stone-using immigrants on their migrations. At the same time, the area covered by these fortifications does not coincide with that of the Nanga. The wider study of the Fiji Archipelago thus furnishes a result similar to that obtained by TŪTING for the Lau Islands, viz. that these fortifications belong to the culture of the stone-using immigrants. It is significant therefore that one of the fortifications of the southern Lau Island Wangava was called "Ndengei" ¹⁾. It will be remembered that in the Solomon Islands, defence ditches were found in San Christoval, Malaita, and Isabel.

Mbau is a very small island half a mile off the eastern coast of Viti Levu. It consists of a central hill, the rest of the island being low-lying. The passage between the mainland and Mbau is so shallow as to be fordable at high water and is nearly dry at low water. MOSELEY ²⁾ records that "the flat lower part of Mbau which is raised only a few feet above the sea, consists of made ground, built of blocks of coral, and mud and stones collected from the vicinity at low water." This is confirmed by HORNELL who says ³⁾ that the low lying part of the island is partly "reclaimed from the shallows of the encircling waters". We are thus confronted with a partially artificial island erected around a natural rock such as in many of the Lau Islands of Malaita, and as described by the myths previously mentioned. The artificial islands off Malaita were also so near to the mainland that it was possible to wade out to them at low spring-tides.

The island Mbau is secured all around against the action of the sea by means of large slabs of sandstone brought from the mainland. These stone slabs are set up on end so as to form a parapet. The slabs vary in size and shape running to 11 feet 8 inches in height. Since the actual height of the sea-wall above the sea is only 6 to 7 feet, the longer slabs project far above the level of the land surface. Little or no attempt has been made to shape the slabs, but irregularities have been made good partly by the fitting together of complemental irregularities in adjoining slabs or by filling in gaps with coral boulders. At intervals, openings were left in the parapet where the water flows up short channels into the area of built-up ground and into these small harbours canoes are run. The two sides of the harbours are protected in the same way as on the sea front. HORNELL counted 25 of these little harbours. The building up of the wall with small reef boulders or even palisades of stakes is a modern attempt to repair the parapet fallen into ruin at some points ⁴⁾.

HORNELL, as well as MOSELEY, have drawn attention to the fact that the facing of the house-mounds, and in particular of the temple mounds of Mbau with stone slabs, is exactly the same as in this sea parapet. Here, too, the slabs are set on end inclined slightly inwards and filled in with gravel

1) TŪTING 900 144. 2) 583 315. 3) 397 25. 4) HORNELL 397 25 ff, fig. 1 p. 26, Pl. B fig. 1, MOSELEY 583 315 f, THOMSON 866 Pl. p. 60, 212, FISON 251 XXXVI.

and earth¹), and the same mode of construction was found in some of the fortifications mentioned afore. This, combined with the fact that Mbau is a partially artificial island completed round a natural core, would be sufficient to justify the opinion that it is the stone-using immigrants who are responsible

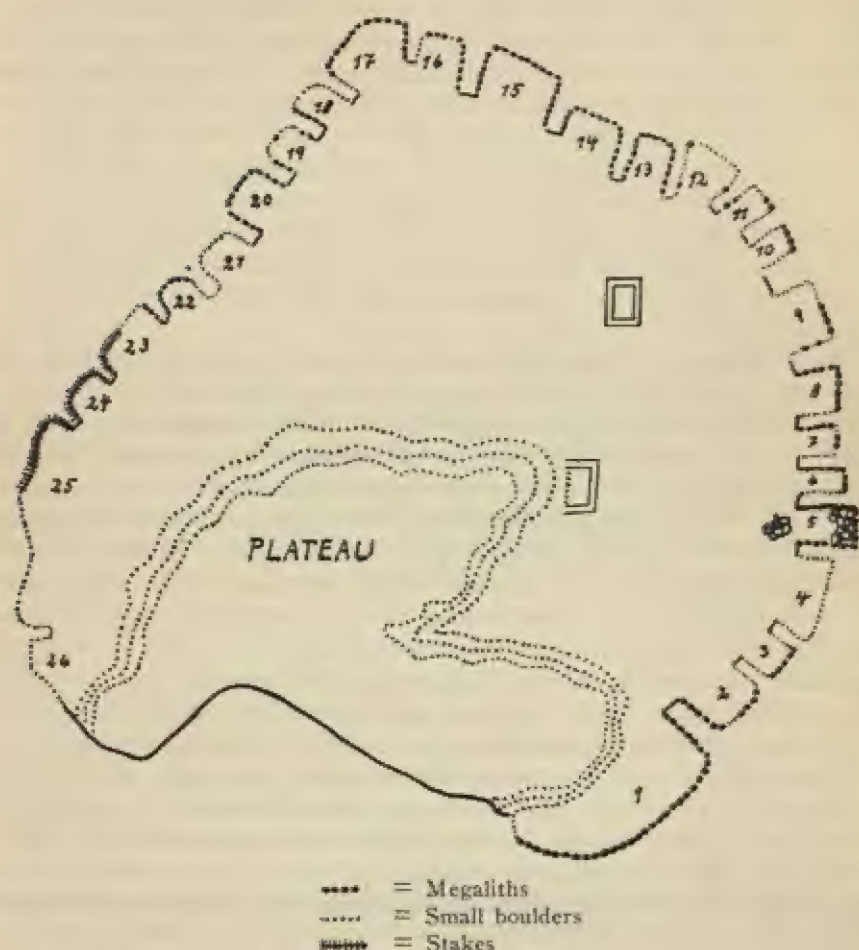


Fig 24. Sketch plan of Mbau Island (After HORNELL 397 fig. 1 p. 26).

for this sea-work. Moreover, this structure resembles strongly the artificial islands of Lau (Malaita), for these latter were likewise faced with a wall of coral stones with several openings forming little harbours; and the village Gumasila in the Amphlett Group, constructed in a manner very similar

to that of an artificial island, was made sea-proof by stone walls, and possessed stone dykes forming small artificial harbours along the sea front. At Mua (Lapaha) in Tongatabu, HORNELL saw "a megalithic-faced "wharf" precisely similar to those of Mbau, together with scattered slab megaliths some still upright, that furnished evidence that in its day the shore line of Mua had been broken into a series of "wharves" and "docks" on the same plan as those of Mbau, the sole difference being that many of the megaliths of Mua were considerably larger in dimensions"¹). HORNELL is of the opinion that the Mbau sea-works were probably adopted from Tonga. But such an opinion is not only contradicted by the facts already mentioned and permitting us to associate this sea-work with the Ndengei stone-using immigrants, but also by the following information which HORNELL himself has recorded about Mbau Island. HORNELL records²): "Tradition says that these revetted "wharves" were first constructed by the original inhabitants, the Levuka tribe, whom the Mbauans expelled when they took possession of the island".

The question now arises who are these Levuka people? Fortunately, we are well acquainted with the history of Mbau Island. There are three separate tribes occupying the island: First the Mbauans who came over to Mbau Island from Viti Levu; they are the conquerors of the island from the original occupants, the Levukans, who after expulsion settled in Lakemba; next there is the Lasakau community, fishermen, who were the henchmen of the Mbauans, and third there are the Soso people, lowest in scale. The Levukans migrated via Ovolau Island and Koro Island where some of them remained; the others sailing on came to Vanua Levu, Thithia, and finally to Lakemba. Once when war broke out between them owing, probably, to overpeopling of Lakemba Island, some of the Levukans migrated to Oneata, Vatoa, Kambara, and even to Ono Island³).

THOMSON⁴) gives the following information regarding the origin of the Mbau people: "Early in the eighteenth century there seems to have been an upheaval among the inland tribes of Viti Levu which sent forth a stream of emigrants to the coast... This event was destined to have a tremendous influence upon the political destiny of the islands, for among the emigrants was the tribe of Mbau, sturdy mountain warriors, still bearing in their physiognomy and dark complexion the proof of their Melanesian blood and their late arrival in the sphere of Polynesian influence". Here THOMSON speaks of the "sphere of Polynesian influence", in the same biased manner as he did with regard to the many light-skinned stone-using immigrants, whom he considered as returning Polynesians; and WILKES in fact says that the Levukans are of Tongan descent⁵). But we must again

1) HORNELL 397 31 f, Pl. B fig. 2) 397 30. 3) HORNELL 397 31, THOMPSON 863 110, FISON 251 1-17, 87 ff, CALVERT 119 133, WILKES 941 198 f, 234, HENDERSON 353 51, HOCART 364 47. 4) 866 22, see also HOCART 364 47. 5) 941 199.

qualify this opinion as merely the personal inference of these students; for apart from the occurrence of light skin, there is actually no ground whatever for presuming Polynesian influence, and precisely light skin has been found to be one of the most important characteristics of the stone-using immigrants.

It has already been mentioned that a ghost path leads from Mbau Island to Ndengei on Nakauvandra. Now, the Melanesian Mbau people are not connected mythologically either with Nakauvandra or with Ndengei, and the other peoples living on Mbau were only brought later to the island by the Mbau people. Therefore none but the Levukans can be responsible for the conception of this ghost path. From this, from the fact that they were of lighter skin, and also since they were the earlier settlers in this region, we must conclude that they belong to the Ndengei stone-using immigrants who came to this district from Nakauvandra. The history of Mbau Island thus strikingly confirms HOCART's opinion that an earlier light-skinned people, whom we have recognized as the stone-using immigrants, were driven from the interior of the island to the coast by the Melanesians—the Mbau people in our present case—who followed closely on their heels. We are faced here with an event exactly similar to that which took place at the neighbouring Rewa River; there, too, many tribes, among others the Kai Rewa, came to the delta from the higher reaches of the river "driven down by internal commotion among the tribes that inhabited the mountains" as THOMSON puts it ¹⁾, and this can only have been Melanesian pressure. Contrary to the opinion expressed by THOMSON who traces the canoe builders of Rewa to Tongan immigrants, we have already emphasized that it is much more natural that they should have descended from the carpenter and canoe builder people of Rokola, since we know from the traditions that these people came from the interior and went down the Rewa River to the coast.

If, then, the Levukans belong to the Ndengei immigrants it can easily be understood why it was they who, according to the tradition, erected the megalithic sea-works. Moreover, it is clearly evident from the character of the ghost path itself that only a megalithic people could be responsible for its construction. THOMSON ²⁾ gives the following remarkable description of this ghost path: "In 1891 a surveyor... was taken by his native guides along a high ridge, the watershed between the Rewa River and the eastern coast of the main island... He noticed that the path was nearly level, and seldom more than two feet wide, and that the ridge joined hilltop to hilltop in an almost horizontal line. Reflecting that nature never works in straight lines with so soft a material as earth, and that natural banks of earth are always washed into deep depressions between the hills, and are never razor-edged as this was, he had a patch of the undergrowth cleared away, and satisfied himself that the embankments were artificial. Following the

1) 866 23, 370, 376 f. 2) 866 119 f.

line of the ridge, the saddles had been bridged with banks thirty to forty feet high in the deepest parts, and tapering to a width of two feet at the top. The level path thus made, extends... to Nakauvandra mountain... It could not be a road, because the Fijian of old preferred to go straight over obstacles... The old men at Mbau... knew... that it was called, the "Path of the Shades"... It has its source... in the Kauvandra mountain, and stretches eastward right down to... Mbau. It is called the Tuatumbalavu (Long Range), but in Tholo and Ra it is called the Tualeita. This range is nowhere broken or cut through, nor does the course of any stream pass through it... The souls of the dead followed this range on their way to Kauvandra". Such an enormous work can in fact only be compared with the big works of earth-shifting carried out for the artificial and terraced irrigation or drainage, for the levelling of the park-like dancing grounds or for other purposes, as also for the erection of the artificial islands, exploits all of which had to be attributed to the stone-using immigrants. The Levukans, the constructors of the sea-works of Mbau, are therefore stone-using immigrants belonging to the Ndengei people. But at the same time it follows that the similar sea-works of Tonga must also be due to the influence of the stone-using immigrants coming to Tonga from Fiji and not vice versa.

A certain number of monoliths were found in Fiji regarding which WILLIAMS gives the following information¹⁾: "They reverence certain stones as shrines of the gods... Rude consecrated stones are to be seen near Vuna, where offerings of food are sometimes made. Another stands on a reef near Nalao... and one near Thokova, Na Viti Levu... is regarded as the abode of a goddess, for whom food is prepared. This, as seen in the engraving, is like a round, black milestone, slightly inclined, and having a liku tied round the middle. The shrine of O Rewau is a large stone ... He has also two large stones for his wives, one of whom came from Yandua, and the other from Yasawa. Although no one pretends to know the origin of Ndengei, it is said that his mother in the form of two great stones, lies at the bottom of a moat. Stones are also used to denote the locality of some gods, and the occasional resting-places of others. On the southern beach of Vanua Levu, a large stone is seen which has fallen upon a smaller one. These, it is said, represent the gods of two towns on that coast". WATERHOUSE²⁾ records that the stone which represented the mother of Ndengei was found in the Rakiraki region in the north of Viti Levu. It was about 18 inches in circumference and 2 feet in height and was set up by the wayside. It was unsculptured. According to BREWSTER³⁾ "phallic and sacred stones were to be found every here and there in the hill country", and a small phallic stone was also found by him on the Nasongo River. HOCART⁴⁾ records "sacred stones" of the Seanggangga tribe in Vanua

1) 956 219-221, fig. p. 220.

2) Quoted by HENDERSON 353 278.

3) 93 89.

4) 361 8, see also BUSCHAN 116 156, fig. 3.

Levu without however, indicating their shape. That these sacred monoliths were erected by the light-skinned Ndengei stone-using immigrants can be concluded from the following facts: One of these monoliths was said to represent the mother of Ndengei (unfortunately nothing is recorded regarding the "gods" which are represented by most of these stones); the distribution of these stones is outside the Nanga area, and the stones which were brought by Lutunasombasomba and those erected by the light-skinned immigrant of Nandronga were all very likely to be monoliths. One of the monoliths pictured by WILLIAMS seems to be sculptured with concentric circles similar to those of the monoliths of Boianai and Bartle Bay on the north-east coast of New Guinea.

On Mbau Island not far from one of the old temple foundations, and

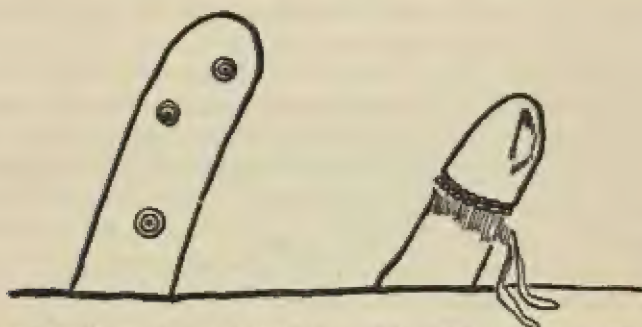


Fig. 25. Sacred stones, Viti Levu. (After WILLIAMS 956 220).

near one of the slab-faced "piers" there was a smooth, phallic-like monolith about 3 feet high and 2 feet wide. The ground around this stone is paved with slabs of coral rock and it seems that the pier was originally flagged over the whole of its horizontal surface, since a large portion of the flagging still remains at the seaward end. This is the well known braining stone, mentioned by many writers. The heads of the victims to be eaten were dashed against this stone. The stone was also called the "Installation stone" of Thakombau when he was proclaimed chief of Mbau, a modern name, which as HORNELL says, is due to the natural reluctance of modern Fijians to refer to evidences of former cannibalistic practices ¹). HORNELL is of the opinion ²) that "the phallic shape suggests that it may have been a sacred pillar—the abode of a god—such as WILLIAMS figures in his *Fiji and the Fijians*". If this supposition is right as I think it is, this monolith, in the same way as the other monoliths mentioned, must belong to the stone-using Ndengei immigrants. And if it is right that cannibalism was

1) THOMSON 866 96, BÄSSLER 35 252, FRASER 267 360, BROWN 102 146 f, DEANE 183 239 f, BRENCHELY 92 164 f, CHRISTMANN 156 11 178, MOSELEY 583 318 f, DUMONT 203 201, HORNELL 397 26 f, fig. 2. 2) 397 26 Note.

introduced by the later coming Melanesians, the connection of this stone with cannibalism would probably be of a secondary nature and due to the Melanesian influence on Mbau.

Close to the foundation of another temple of Mbau Island a row of stone slabs was erected, the lower end embedded in the ground; one of the slabs was used for dashing out the brains of the victims¹⁾. HORNE²⁾ furthermore mentions five broken basalt columns of Mbau, plundered from the Rewans, who in turn are said to have captured them from the people of Lakemba, which latter place we have seen to be one of the dwelling places of the stone-using Levukans. MOSELEY and ERSKINE also mention two columns. MOSELEY's opinion is that they are rough unworked stones, whereas ERSKINE thinks that they are worked, but no details are given regarding them. These columns had been brought by a Mbau chief from a small island in the harbour of Kandavu, where they were defended for a long time by the people who hold them sacred³⁾.

Many writers have recorded the case of the most celebrated cannibal Ra Undreundre of Rakiraki. His son took a missionary to a line of stones, each of which represented a human being eaten by his father. They numbered 872, but a number had then been removed⁴⁾. At Namosi for every corpse eaten, a stone was placed near one of the Mbures. Four hundred stones were counted, and the natives said a lot of the stones had been washed away when, some time ago, the river overflowed its banks⁵⁾. But nothing is recorded regarding the shape of these stones.

A certain number of stone-graves and tumuli are recorded in Fiji. Of Nakello village on the Rewa River, MOSELEY⁶⁾ gives the following description: "In the centre of Nakello are the tombs of two chiefs. They consist of two large tumuli of earth, adjoining one another, one being older than the other. The older tumulus is oval in form, about 20 yards in diameter at the base, with sloping sides, and about 10 feet in height. At the top is a flat circular space, which is enclosed by a wall formed of slabs of coral rock, set on edge; none of the slabs being very large. Another line of slabs surrounds the mound about halfway up, and here there is a sort of step on the side of the mound. Within the upper circle of stones are some slabs of tree-fern stem set on end like the stones. The more recent mound has no circles of stones, and is oblong in form".

Apart from the tumuli in the New Hebrides and New Caledonia, tumuli graves of such size have been encountered particularly in the "heo" of San Christoval on which various types of stone-work were also found. This seems to be an additional indication of the relations between Fiji and

1) BRENCLEY 92 164, MOSELEY 583 316, 318, fig. p. 317, CHRISTMANN 156 II 178.
 2) 397 31. 3) MOSELEY 583 316, ERSKINE 231 193. 4) THOMSON 866 109, HENDERSON 353 56 f, CHRISTMANN 156 II 146, WILLIAMS 956 p. 213. 5) BROWN 102 149 from SEEMANN 767 177 f. 6) 583 327, fig. p. 327.

San Christoval as far as the culture of the stone-using immigrants is concerned.

In the centre of the Rewa River village which, according to GRAEFFE, bears the name Viti, there was a chief's grave surrounded by a stone wall¹⁾. Speaking of the interior of Viti Levu in general, MARZAN²⁾ says "if it is a chief, stones are heaped up on his grave". Of Mbau Island, DUMONT D'URVILLE records³⁾ "a kind of grave mound 10 to 12 feet high, covered with enormous pieces of rock, planted with trees and with convolvulus caeruleus". But this information is not confirmed by any other writer as far as I can see. WILLIAMS⁴⁾ gives the following information regarding burial on Fiji in general, without precisely indicating the locality. In the case of a chiefly woman a canoe was placed on a large mound cast up for the purpose and faced with stones. It was then embedded in earth and covered over with shingle. During the digging preparatory to making a garden in Levuka village on Ovalau Island "a repository for their dead, where many stones had once been placed, which had become scattered", was found⁵⁾, but nothing else is recorded about

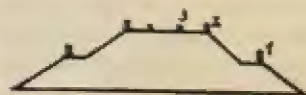


Fig. 26 Tumulus at Nakello, Viti Levu (After MOSELEY 583 327).

1—Lower circle of stones;
2—Upper circle; 3—Tree-fern stems.

this grave. It has already been mentioned that Levuka is one of the villages where some of the stone-using Levukans settled down whilst the others went to Lakemba. In the village of Levuka, ERSKINE saw the grave of a child, which he describes as a diminutive house resting on a foundation of white coral and stones⁶⁾. At Lakemba, where the Levukans after their expulsion from Mbau finally settled, great chiefs are buried in large stone coffins, which are placed on the surface of the ground, a great heap of sand being raised over and around them. The burial of one of the Lakemba kings, which FISON witnessed, was conducted as follows: six slabs of white sandstone were cut smooth and flat and carefully fitted together so as to form a large sarcophagus, 7 feet long, 3½ feet broad, and 5 feet deep. A suitable spot near the beach was cleared. Here the lower slab was placed on the ground; the side slabs and those at the ends were set up in their places; and then white sand was poured down until a mound was formed about 15 feet square, and somewhat higher than the coffin, which stood in the centre of the mound. The sand was kept in its place by a strong stone wall on every side. The body was laid a full length in the coffin; the top slab was put on as a lid, and about a foot of sand was poured upon it. The whole surface of the mound was then levelled, and covered with little pebbles⁷⁾. Without precise indications as to the locality, WILLIAMS records⁸⁾ that

1) GRAEFFE 301 5, see also WILKES 941 212 f. 2) 535 89. 3) 203 203. 4) 956 192. 5) WILKES 941 200. 6) ERSKINE 231 216. 7) FISON 248 145 f, 251 167. 8) 956 192.

common graves are only edged round with stones, or have nothing more than one stone set at the head and another at the foot. And similarly of "Fiji" in general OBERLÄNDER says ¹⁾: "The graves of chiefs are marked by stones". BREWSTER ²⁾, records the case of a man of Numbumakita village at the head of the Waisomo River, south of Nakauvandra who died some 20 miles away from his native village to which he was carried for burial. The tired carriers who brought him back put the corpse down every now and then and marked the place by putting stones at his head and heels. Afterwards his friends and relations planted scarlet dracaenas at the outer end of the stones which denoted his various resting-places. Without precise indication as to the locality WILLIAMS ³⁾ records of "Fiji" in general, that on some graves he had seen large cairns of stones. These cairns "are sometimes set up also to mark the spot where a man has died" ⁴⁾. The following incident which happened in the hill country of Viti Levu is probably due to this latter custom. In 1867, the Reverend THOMAS BAKER was murdered by the people of Vatusila. When, in 1910, a new chief who was an ardent Wesleyan, succeeded in Vatusila, "he and all his people were heartily ashamed of the misdeed of the tribe, and had erected a cairn where it occurred, around which they had planted the lovely scarlet-leaved native dracaena" ⁵⁾.

The question as to what culture we can attribute the tumuli as well as this use of stone in connection with burial, is here again complicated by the fact that many of the data, which are in any case not abundant, are recorded without indication as to the localities. Moreover, the possibility cannot be entirely rejected that in some rare cases secondary Polynesian influence has been at work. WILLIAMS ⁶⁾ in fact records the case of a Mbau chief who sent for Tongans to cut a stone tomb for him. But on the other hand, it is evident from the few data quoted that the area in which tumuli and stone graves occur lies outside the Nanga area, and most of the stone graves and tumuli are actually recorded in those regions in which the stone-using immigrants had settled down. HOCART has rightly drawn attention to the fact that it is difficult to fail to recognize the resemblance between a Fijian grave and the foundation of a house. In Lau, he says, they both consist of long mounds, prevented from crumbling away by a border of rounded stones piled up or of slabs planted in the ground; chiefs' graves, like chiefs' houses, are higher ⁷⁾. If the tumulus of the Rewa River is really a tomb, its superposing of two mounds would correspond to the terraced Mbure foundations found in some cases. The resemblance is in fact not only a exterior one. Many of the Fijian tribes buried their dead under the floor of their dwelling houses or temples, i.e. in the stone foundations of

1) CHRISTMANN 156 II 177. 2) 93 258 f. 3) 956 192. 4) Regarding stone cairns on the western coast of Viti Levu in connection with the Luve-ni-wai (children of the water) gods, see THOMSON 886 10, 169 f. 5) BREWSTER 93 27. 6) 956 191. 7) HOCART 367 447.

these houses ¹). Are we accordingly entitled to draw conclusions regarding a genetical relation between house foundations and tumulus-graves? The distribution of tumuli is, in fact, not unfavorable to such a view, although it must not be overlooked that we can mention but few examples of tumulus-like graves. It is therefore worth pointing out that, as HORNEILL has rightly emphasized, the rectangular temple platforms of Mbau are built on the same plan as the Tongan langis and the threestep truncate pyramid tombs of the chiefs; and he adds that "they have also a strong family resemblance to the double platforms of the club houses of Yap", whence, we have shown, the megalithic culture must originally have come to New Guinea and accordingly therefore to Melanesia in general.

Among the various modes of disposal of the dead, cave burial is also found in many parts of the archipelago ²). At the Nasongo River (North Tholo), the entrance of some of these caves was neatly walled up with loose stones ³). This is, as also in the case of some of the other types of stone-work, certainly reminiscent of New Caledonia. It has already been pointed out that on the basis of our present knowledge no direct connection can be proved between Fiji and New Caledonia; the resemblance between some of the types of megalithic stone-work is, on the contrary, due to the fact that it was one and the same culture, which although coming from different directions, influenced both these areas. No definite reply to the question as to what culture the stone-work connected with cave-burial belongs to has been obtained in New Caledonia, and the rarity of this custom in Viti Levu makes it impossible to give any definite answer to this question.

Terraced irrigation for taro which we have attributed to the culture of the stone-using immigrants is practised also in Fiji. The water is conveyed to the taro beds through artificial canals, or by pipes made of hollow tree-fern trunks or bamboos. Unfortunately here again, most writers have recorded this custom of "Fiji" in general, and have given no precise indication as to the localities ⁴). Furthermore, terraced irrigation is recorded in Kandavu Island ⁵), and ERSKINE ⁶) records that at Lakemba and Levuka where this system is also known, the ditches of the fortified villages are occasionally used for irrigation. Although but few of these reports apply to specified localities, the presence of the stone-using immigrants is manifest at those places which are clearly indicated: thus Levuka and Lakemba were found to be the dwelling places of the stone-using Levukans and many of the Kandavu tribes descended from Nakauvandra, the very centre of the stone-

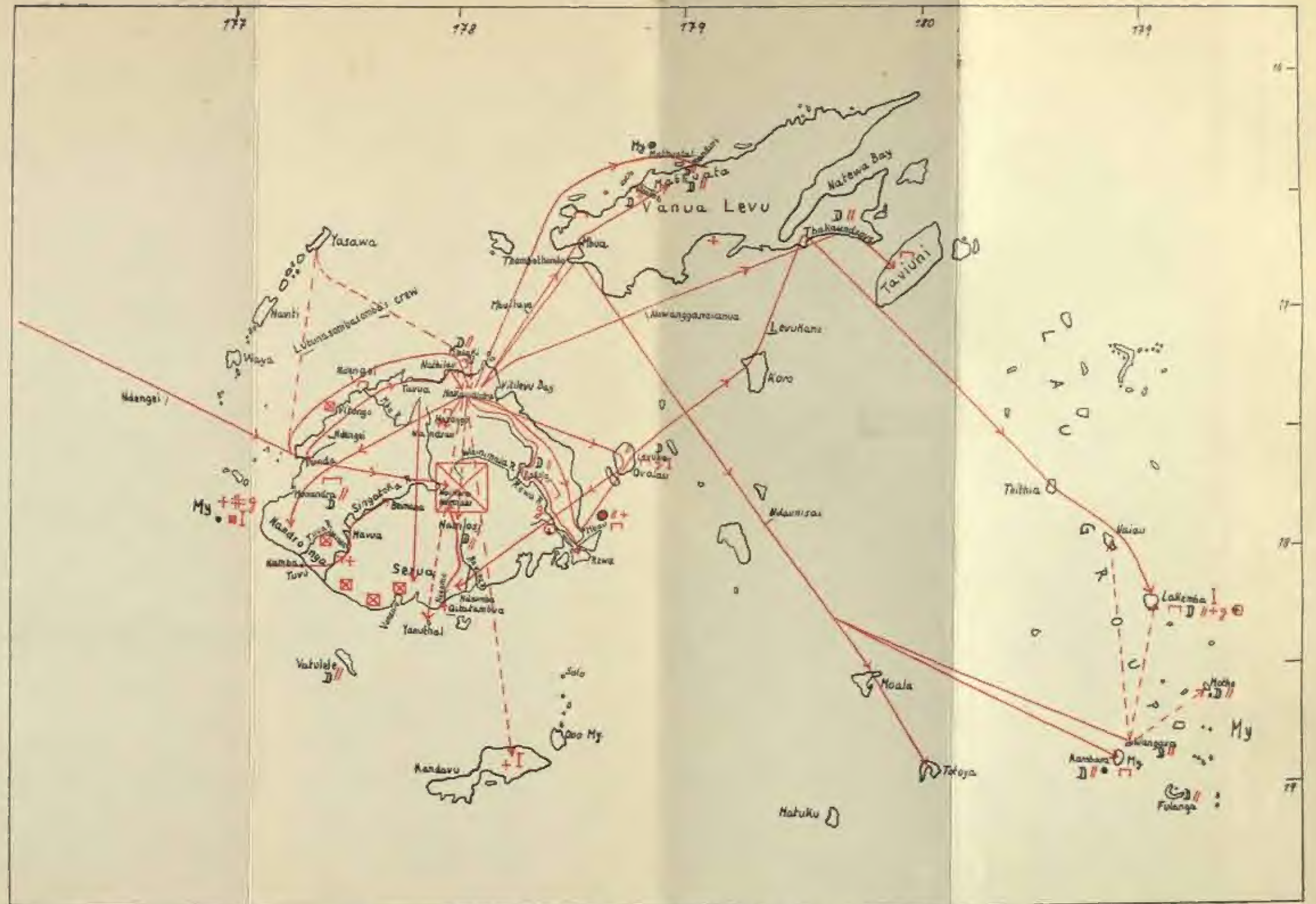
1) See WILLIAMS 956 191. By BREWSTER (93 35) this custom is recorded of the inland tribes of Viti Levu, by MARZAN 536 88, 96) of the western tribes as for instance of Vunamaravu, and Tholo West, and by CAPELL and LESTER (125 314) of eastern Viti Levu. 2) See FISON 248 141, 143 f, MARZAN 536 88. 3) BREWSTER 93 43. 4) See WILLIAMS 956 61, 64, ANDERSON 18 102, 230, GLAUMONT 294 46, PERRY 654 17, BERNARD 69 281, THOMSON 866 339. 5) THOMSON 872 650. 6) 231 171, 268.

using immigrants, from where they have spread over the whole archipelago. The Fijian evidence thus confirms the conclusion reached in respect of the rest of Melanesia viz. that terraced irrigation belongs to the culture of the stone-using immigrants. With regard to the social organization, it might be mentioned that patrilineal clans are usual in the Fiji Islands as well as in Lau, although there are some traces of a dual system with matrilineal descent too. But these traces are, characteristically, somewhat disguised in eastern Viti Levu, and it is highly significant that they occur in that part of Vanua Levu which appears to have been least affected by the invasion of the stone-using immigrants. The traces of dual organization which do exist in the hills of Viti Levu are, according to the statements of the natives and to genealogies, of more recent origin ¹⁾.

Sacred Plants. In addition to the data already quoted it might be mentioned that dracaenas (qai or masawe) are sometimes seen in rows on the edge of a yam bed, as WILLIAMS ²⁾ records of Fiji in general. On the headwaters of the Wainimala River and at the Nasongo River, the villages are embellished by the planting of dracaenas, crotons, and other variegated shrubs ³⁾. On Kambara Island, *evodia hortensis* (uthi) is used, amongst other plants, for medicinal purposes ⁴⁾. In Vanua Levu, certain officials of the chiefs are installed in office by binding a red dracaena leaf round their arm ⁵⁾. Dracaenas are used in connection with the rites of fire walking ⁶⁾. According to information given by MARZAN, the houses of "Fiji" were surrounded in former times by red vasil plants, which, according to ROUGIER, is *cordyline terminalis* ⁷⁾. *Cordyline jacquinii* (tikula or masawe) is widely cultivated in gardens, and *cordyline sepiaria* (vasili-kau or vaivai) is often used for fences and hedges ⁸⁾.

Prehistoric objects. Only very few prehistoric objects have been found in Fiji as far as I know. A polished hatchet was found in the alluvial deposit of the Mba River, 12 feet below the surface. The shape of this hatchet is, however, not mentioned, and THOMSON has rightly pointed out that in a river like the Mba, subject to heavy annual floods, the depth is no proof of age. On Yasawa Island, a cache of polished hatchets was found, three of which were gouge-shaped and of elaborate finish ⁹⁾. We shall revert to these hatchets again later. There are a few problems which will now be dealt with separately, as their solution is of great interest.

1) See DEANE 183 3, HOCART 364 47, RIVERS 725 I 286, II 307, THOMSON 866 175, 188, 192, THOMPSON 864 21 f, 43, 60, etc etc. 2) 956 62. 3) BREWSTER 93 41, 112.
4) THOMPSON 864 126, 130 f. 5) WILLIAMS 956 28. 6) ROTH 745, 746 44 ff, ALLARDICE 17 72. 7) MARZAN 536 90, ROUGIER 747 1007. 8) PARHAM 629 85, 102.
9) THOMSON 866 10 f.



The geographical distribution of the Megalithic Culture and its migrations in the Fiji Archipelago.



III. THE PROBLEM OF SUN CULT

In a study dealing with megaliths it is almost impossible to disregard the problem of sun cult, since many students have maintained a genetic relation between sun cult and megaliths in various regions of the globe. ELLIOT SMITH in many writings claimed this connection for Europe and the Mediterranean area; PERRY¹⁾ claimed it for Indonesia, and for Melanesia it has been maintained by RIVERS and DEACON²⁾. But as far as Melanesia is concerned none of these writers had a comprehensive knowledge of the distribution of the megalithic culture, nor has the distribution of sun and moon cult been studied thoroughly by them. Most of their assumptions regarding the existence of an astral cult are based upon special interpretations of certain facts. PERRY was plainly aware of the difficulties in sifting the material, and he says³⁾: "The attempt to record only the facts concerning the sun cult proved abortive; for it was difficult to discover any standard to which facts could be referred. Some peoples performed ceremonies in honour of, and made offerings to the sun, and thus could be said to practise a sun cult. But others merely entertained certain beliefs concerning the sun. In other cases again, only tales about the sun had been recorded. The difficulty of deciding which facts to retain for examination, and which to reject, was avoided by including in the survey all practices, beliefs and tales concerning the sun that it was possible to collect". PERRY thinks "that they all had a bearing upon the original problem". But in merely juxtaposing the facts, there is a danger of assembling apparently similar, though historically unrelated data. And it is open to doubt whether tales about the sun or the moon should be included in such a survey of astral "cult", just as much as it would be to consider the world-wide custom of hailing the new moon as moon "cult". In fact, there are few things regarding which the sources of information are so indefinite as this so-called sun or moon "cult", and many of these records are but the fantastic inferences of the recorders themselves. This lack of precision makes the whole investigation of this problem not only distasteful, but constrains us to utter a word of warning to the reader against taking these considerations as conclusive.

According to GLAUMONT, there are traces of sun cult in New Caledonia where fires are lighted on the tops of the mountains. SARASIN thinks that the sun was considered as sacred, since, according to LEENHARDT, the summit of the mountain on which the rising sun appears first was sacred; this, according to SARASIN, is further confirmed by the fact that near Nékoué

1) 651 86 ff. 2) RIVERS 725 II 549, 580, 727 431 ff, DEACON 186 333 ff. 3) 651 8 f.

on the western coast, there was a sacred place called "invocation of the sun" where the sun was called upon not to set before a wanderer had reached the eastern coast. According to HADFIELD, the people of Lifou kneel down or bow their heads before the sun, moon and stars¹⁾. ARCHAMBAULT's opinion according to which the rocks with petroglyphs were placed so as to face towards a certain direction, has already been rejected, but SARASIN agrees with ARCHAMBAULT that certain petroglyphs, contrary to LUQUET's opinion, are symbols of the sun²⁾. DEACON³⁾ has expressed the opinion "that a cult of the sun, moon, serpent and sacred fire was introduced into New Caledonia ... by immigrants closely related to those who introduced the ghost societies associated with the sun cult into Melanesia". But there are no ghost societies in New Caledonia. Even if certain petroglyphs were symbols of the sun, this throws no light upon our problem, since it is uncertain to what culture petroglyphs belong and they cannot in any case be attributed to the stone-using immigrants. For the time being therefore, Deacon's remark must be taken as his personal opinion, but cannot be proved.

It is significant that sun and moon worship is found in the southern New Hebrides, viz. in Aneityum, Aniwa, Futuna and Erromonga, i.e. precisely on those islands on which the Polynesian influence is strongest, where the Suqe is non-existent, and where the influence of New Caledonia is felt. On Aneityum, the moon was especially honoured by offerings of food placed on altars of wood and also by songs and dances in her praise⁴⁾. Murray mentions the sun and the moon as being amongst the "gods" of Aneityum; Inglis and Gunn record a number of big blocks of stone one of which was called the sun and the other the moon. The stone blocks were marked with rude sculptured figures of fishes, birds, turtles, trees and star-like figures "said to represent the heavenly bodies", human feet, etc.⁵⁾. There is also a representation of the sun, the crescent moon and the full moon, so that Gunn thinks "this stone has probably something to do with their worship of the sun and moon"⁶⁾. The relation of these stone carvings to the petroglyphs of New Caledonia has been maintained by SARASIN but is doubted by SPEISER⁷⁾.

In Futuna as well as in Aneityum, wooden altars were found "the two

1) GLAUMONT 293 115 ff, LEENHARDT 481 254, BOURGEY 89 188, HADFIELD 331 110, SARASIN 758 289. 2) See SARASIN 758 14, 289, ARCHAMBAULT 19 267, 20 697 f, 22 522, NEVERMANN 616 217. Regarding a myth of the sun and the moon in New Caledonia and the Loyalty Islands see HADFIELD 331 232, SARASIN 758 57. Regarding a feast "pour cuire la lune" held on the occasion of the appearance of the new moon, see LEGRAND 485 56 quoted by SARASIN 758 289. The new moon is greeted with shouting and whistling in New Caledonia and Ouvea. SARASIN 758 289 with many references. 3) 186 334. 4) LAWRIE 467 712. 5) See LAWRIE 467 712, INGLIS 402 30, MURRAY 597 26 quoted by SPEISER 789 360 f, CAPELL 121 80 f. 6) GUNN 313 228 quoted by SPEISER 789 361, 441 f, Pl. 107 fig. 1, 3. 7) Loc. cit.

tallest posts in the altar representing the sun and the moon"¹); and in Aniwa, a similar cult of the sun and the moon also seemed to exist²). In Futuna, GUNN saw two volcanic boulders called "Sun and Moon" which had been "worshipped by the Futunese in heathen times"³).

On Erromonga, the sun and moon, especially the moon, were sacred; the moon is symbolised by the navilah stones, and figures representing the moon are carved on the trees in the form of semicircles⁴). In the rock-paintings, sun and moon are not represented.

In Fate, as has already been mentioned, a stone block was found with carvings representing the sun and the moon⁵). These petroglyphs are most likely due to New Caledonian influence.

In the other New Hebrides, which we have seen to be one of the richest areas in Melanesia as far as the influence of the stone-using immigrants is concerned, carvings or pictures of the sun or moon do not occur, and even DEACON remarks: "There is, it must be admitted, no evidence of direct connection of the stone tables and altars of the New Hebrides with a cult of the sun, but" adds DEACON "the representation of the sun and moon on stone monuments elsewhere in those islands renders such a connection extremely probable"⁶), an opinion in which he apparently follows RIVERS⁷). But this "elsewhere" is precisely the southern islands where some of the petroglyphs are connected with those of New Caledonia, and it has been seen that the New Caledonian petroglyphs were in no way associated with the megalithic culture. For these reasons DEACON's conclusion regarding the other islands of the New Hebrides is nullified.

CAPELL gives the following description of what he calls sun and moon worship on Epi Island, where the presence of the stone-using immigrants was seen to be manifest: The sun worship is the less developed, and remains an individual matter. The aim is sun-making, and it is looked upon as a variety of magic. Of the moon cult he says: "They... spat their piece of pork in the direction of their victim, at the same time pronouncing his name. This festival is held when the october moon stands overhead at sundown. In both sun and moon worship prayers are offered. Sacrifices are also offered, with the formula "This is your food"⁸). It is obvious from this description that the sun-making is a kind of magic, or the prayers and sacrifices offered may be said to be religious in character; but in any case it is not "worship" or "cult" of the sun. The description of what CAPELL calls moon cult is even less clear, so that it may be disregarded⁹).

1) GUNN 313 218 quoted also by SPEISER 789 360, HUMPHREYS 398 116 f, CAPELL 121 75. 2) CAPELL 121 73. 3) Quoted by SPEISER 789 442. 4) ROBERTSON 731 144, 369, 389 ff, SPEISER 789 360, MACDONALD 513 171, BRENCHEY 92 320, 322, CODRINGTON 162 295, CAPELL 121 73, HUMPHREYS 398 136 ff. 5) SOMMERVILLE loc. cit., SPEISER 789 360. 6) DEACON 186 342. 7) See RIVERS 725 II 515. 8) CAPELL 121 66. 9) Regarding a myth of the origin of the sun and the moon, see RIDDLE 718 157 f. The myth of a Seniang man (Malekula) who found his lost pig's tusk near

In our study of the Sakaos, it has been mentioned that, at the entrance to the fifth Suqe rank, trees were stuck into the ground upside down, and that sun and moon were painted on them. It has, however, been seen that the Sakaos differ from the other inhabitants of the island in being of a dark Melanesian type, and having a more primitive culture; it is moreover significant that no stone-work was erected by them in connection with the Suqe which had apparently been adopted by them, but which did not belong to their original culture. This representation of the sun and the moon can therefore in no way serve as a proof that some connection existed between the sun cult and the Suqe. I am aware of only one single occasion on which mention is made of the sun in connection with the Suqe. The name of the Suqe rank "Wometeloa" (the 10th rank in Vanua Lava and the 14th rank in Mota) means "the face of the sun", and its symbol is a disk which, according to CODRINGTON, represents the firmament with the heavenly bodies painted on it¹). It would be entirely arbitrary, however, to draw any conclusion from this completely isolated Suqe name among the great number of other names showing no association whatever with the heavenly bodies. SPEISER has concluded from the Suqe name "Wometeloa" "that the Suqe in the Banks Islands possibly adopted the remnants of an astral cult", and elsewhere he says: "These data (i.e. regarding astral cult) make it obvious that in the southern islands an astral cult did exist; the only question is whether in the northern islands this cult has ever been much developed, or whether it has been ousted by the Suqe"²). This view agrees with our own in so far as SPEISER does not believe in any genetic connection between the sun cult and the Suqe, and thus with the megalithic culture. But whereas SPEISER seems to imply that sun cult is older than megaliths, I am inclined to believe that it probably forms part of the culture of the later coming Melanesians.

According to a myth of South Pentecost, a ray of the sun fell upon a woman causing her to become pregnant; she gave birth to a son who was the "fils du soleil". Later he married, and became the founder of the sun clan³). Are these people really the "children of the sun" as PERRY had in mind? It is highly improbable, since here the sun is one of the many "totems" of the numerous clans, as are yam, taro, and the sea, for instance⁴). The members of this sun clan play no particular part, and differ from the

the sun (see DEACON 184 200-202) is of no interest to our problem and is only remarkable in so far as a very similar myth of a lost fish-hook is known on Epi, Lifou, Kei Island, Minahassa and even in Japan. See RIDDLE 718 163 f, HADFIELD 331 83-86, PLEYTE 664 562-565, KERN 426 501 f, MÜLLER 590 533-535. A myth known in the Big Nambas region, Malekula, records that the world was created by the moon, but the informants denied that there was any cult of the moon in the tribe. DEACON 184 46. In Seniang the moon is supposed to form the features of children. DEACON 184 235.

1) CODRINGTON 160 104 f. 2) SPEISER 789 360 f. 3) TATTEVIN 855 458 4) See TATTEVIN 855 448 f.

other clans only in that they are the possessors of sun magic in the same way that the members of the other clans possess the magic for taro, yams, etc. ¹⁾). Therefore one cannot speak of sun "cult" here. On Gaua Island, one moiety is similarly believed to have been created by the sun ²⁾), but nothing else is recorded about this ³⁾).

RIVERS' principal argument in favour of the presumed connection of certain societies with the sun cult is their symbolisation of birth, life and death, the seasonal character of the ceremonies, and the burning of masks ⁴⁾). Such reasoning can only be accepted, however, with the greatest scepticism. With regard to the graded societies RIVERS himself must admit that "in the Banks and Torres Islands and the northern New Hebrides, the rites have no obvious seasonal character. But" adds RIVERS, "the people of Mota speak of the birth or death of a tamate. It is thus suggested that the representation of the birth, life and death of the tamate in the Banks Islands may have had its origin in the idea of the representation of the annual birth, life and death of the sun" ⁵⁾). RIVERS sees further proof for the connection of the Tamate liwoa with the sun cult in the fact that it is said of the traditional originator of the Tamate liwoa that a great light filled the house when he was shown to his wife's parents, and his final disappearance by sinking into the earth also suggests, according to RIVERS, that he was a personification of the sun ⁶⁾). I think it is difficult to follow RIVERS on such hypothetical ground ⁷⁾).

Fox has pointed out the connection of the Araha with sun cult in Arosi on San Christoval, and it will be remembered that the Araha were the principal representatives of the stone-using immigrants. The Araha are connected with the sun by their ornaments. The shell-money, which is worn only by the Araha, is called "sun-blood"; the large shell-disk worn only by the Araha on the forehead, is called the disk of the sun; the last operation in raising a boy to be an Araha is to tattoo the sun on his shoulders. A widow of an Araha is said to "marry the sun", and does not marry again ⁸⁾).

1) See TATTEVIN 855 448 f. 2) RIVERS 725 I 22. 3) For a myth of the sun and the moon of Aola, see CODRINGTON 160 348. In the Banks and Torres Islands the new moon is heralded with shouting, and on the occasion of a lunar eclipse, offerings are made to the moon to make it appear again. SPEISER 789 360, COOMBE 170 151; for general remarks regarding sun and moon worship in the New Hebrides, see MACDONALD 513 171, ECKARDT 209 24. 4) RIVERS 727 431 ff. 5) RIVERS 727 436 f, 725 II 513. 6) RIVERS 727 437. 7) In Santa Cruz the moon is thought to have created the whole world and the people, and it is "worshipped" and invoked. See RIVERS 725 I 226 f, II 426, BEASLEY 53 28, COOMBE 170 175, SPEISER 796 164. For a myth of the sun and the moon see COOMBE 170 192, O'FERRALL 622 224. 8) Fox 263 16, 184, 239 f, 294 ff, 325, 358-60, 363. There are also a number of emblems in San Christoval which probably represent the moon; thus a certain mother-of-pearl crescent ornament is called tahi warowaro, warowaro being a Bauro word for moon. Another shell-disk ornament is called "the moon". A similar disk in Santa Cruz worn on the breast and made from the shell of the giant clam is also called "the moon". There is a children's song to the sun and the moon in Bauro in the

The data recorded in Saa and Ulawa are very scarce and indefinite. A chief of Saa had a bonito canoe called "arito mae", "arito" meaning "sun"¹⁾, and the sea spirits, which are certainly connected with the immigrant people of this island, are associated with the sun shower²⁾. IVENS, who records this, was careful not to draw any conclusions from it³⁾.

In the northern part of Malaita, where the existence of the stone-using immigrants is clearly manifest, there are several stories about women who conceived by the sun and who bore children to the sun. It has already been mentioned that the mother of Sina Kwao, one of the most characteristic representatives of the stone-using immigrants, was named "Bira ana hato", i.e. "Cleave to the Sun". IVENS has inferred that this "points either to a tradition of her birth from the sun, or else it means that her own son, Sina Kwao was conceived through the action of the sun"⁴⁾. The myth of Vulcan-angela of Malaita and Florida who reached the sun has already been mentioned among the numerous other stories of certain men who ascended to the sky whence they later returned. It has, however, been seen that there is generally no association with the sun in these stories, and this is true also of the analogous story of Kamakajaku of Isabel.

In Florida Island, there formerly existed the secret society called Matambala. RIVERS, according to his scheme, has emphasized that "here we have definite evidence of the seasonal character of the celebrations. They began in the month when the canarium nuts, which form one of the staple foods of the people, ripen and the gathering of nuts to be offered as first-fruits formed the opening rite in the ceremonial. At the end of the proceedings the masks were burnt as in the Dukduk"⁵⁾. RIVERS has not taken into consideration that the seasonal character of the ceremonies was caused by the ripening of the canarium nuts; and from the fact that the ceremonies took place only at intervals of several years, he is accordingly forced to draw the following conclusion: "If the annual celebration of the course of the sun was once the object of the rites, they had departed very widely from their original purpose"⁶⁾. The only direct connection of these rites with the sun and the moon lies in the fact that, in the course of the

Bauro language, i.e. the language of Fox's dual people, but it was heard by Fox on the coast. Fox is of the opinion that the moon cult belongs to his dual people, but emphasizes that this opinion is very indefinite 263 357-359. A myth of the sun and the moon exists here too. See Fox 263 338; 357, COOMBE 170 240.

1) IVENS 403 142 f. 2) IVENS 403 475, 480. 3) Regarding a myth of a woman in the moon, see IVENS 403 396. 4) 404 292 f. It is worth pointing out that this "cleaving" in the neighbouring Lau Islands is mentioned in connection with the moon. Here it is said that a child put out its hand to the moon. It touched the moon and was held fast there. It is now the "man in the moon". IVENS 404 285, 409 68. During an eclipse, the Lau Islanders utter an incantation to the moon. IVENS 409 89. Foy has interpreted the well-known breast decorations as symbols of the moon. BALFOUR 48 35, SPEISER 796 164 Note 4. 5) RIVERS 727 436, COBRINGTON 160 95. 6) RIVERS 727 436.

celebrations, sacred houses were built in which images of the sun and the moon were kept ¹). According to the tradition, it was because of a quarrel regarding the succession of the chieftainship that Siko, a man of Bugotu (Isabel) left Bugotu and went with his people to Florida, where he introduced the Matambala. Here, he divided his men among twelve villages and appointed them to be chiefs in these villages ²). RIVERS has identified these immigrants with those who have brought the Suqe and Tamate to the New Hebrides ³). The fact that these immigrants were chiefs, and that the stone-using immigrants of Malaita have actually been seen to have come from Isabel, would seem to favour Rivers' opinion. It must, however, be emphasized that nothing else is known which would permit us to consider Siko as a stone-using immigrant; the existing stone-work and the use of sacred plants in Florida have no functional connection whatever with the Matambala, nor have the myths of the stone-using immigrants any relation to this society.

Therefore there is no justification for the conclusion that the Matambala forms part of the megalithic culture. On the other hand, there are good reasons for concluding that the immigrants and the society they introduced were Melanesian; for the Dukduk can clearly be shown to belong to the Melanesian period, and it will be remembered that in the Bougainville Strait it was precisely the recent and black-skinned Melanesians who became the chiefs.

In Kia, on Isabel, each of the three principal clans is subdivided into several groups which take their names from a natural object; one of these objects is the sun ⁴), but nothing else is recorded. We have seen that there are only a few traces indicating the presence of the stone-using immigrants on Isabel, but this may possibly be due to a lacuna in our knowledge ⁵).

On Guadalcanar, where the presence of the stone-using immigrants was seen to be manifest, the sun, moon, serpent, and sacred fire are "totems" of the Kindapalei clan and offerings are made to the sun in conjunction with the moon ⁶). But here again it must be emphasized that neither functionally nor mythologically is there any connection between this sun cult and the elements of the megalithic culture.

In Buin, the sun and moon are very often represented in decorative art, e.g. on dancing clubs, on the posts of the chief's houses and on the drums of the chiefs. Great chiefs are called "chiefs from the region of the sun's pupil." In the morning the sun is called "sun pupil" and the region of the sun's pupil, according to THURNWALD, seems to be the region of the rising sun. In songs, the singer calls himself "the sun's eye" which is a frequent self-glorification ⁷).

1) See RIVERS 727 436, DEACON 186 333, CODRINGTON 160 94. 2) CODRINGTON 160 95 Note 1. 3) 725 11 231. 4) RIVERS 725 11 245, 339, 351). 5) Regarding the man in the moon in Ontong Java, see PARKINSON 632 197. 6) RIVERS 725 1 243 f, 11 425, 429, DEACON 186 333. 7) RIVERS 727 436, THURNWALD 878 I Pl. XII, 881 133, 883 525, 887 13, 889 315 Note 5.

These data make it clearly evident that there is a certain association between the chiefs and the sun. It has, however, been seen that it is the very recent Melanesian Mono-Alu immigrants who became the chiefs of Buin, and that they were by no means identical with the stone-using immigrants who came to that country before the Mono-Alu¹). The carved design on the monolith of Iltopan (Buka) which is likewise used as a pattern for tattooings²) strongly resembles a sun, but there is no information from a native source on this point³).

The conception of the devouring monster occurs in the Rukruk rites in North Bougainville and the Buka Passage, during which the novices are secluded wearing the well-known balloon hats; the boys must undergo a mock death after which they are brought to life again; the hats are burnt at the end of the ceremonies. These ceremonies, as is well known, show strong resemblances to the Dukduk of New Britain⁴). RIVERS is of the opinion that the Rukruk is connected with sun cult, and in support of this opinion he says⁵): "One obvious feature is the wearing of peculiar head-dresses which often have a globular form". I cannot imagine a more feeble argument.

Regarding the Dukduk of the Gazelle Peninsula and some of the neighbouring regions and its presumed connection with sun cult, RIVERS says⁶): "The Dukduk dies annually at one season of the year, and comes to life again at another. We know of nothing in the ritual of these societies which points to the sun as the being so represented. We only have the seasonal character of the celebration". We have already expressed the opinion that little can be proved by this argument alone. RIVERS has attempted to support his view by saying: "While there is thus no direct evidence that the function of the Dukduk societies is to celebrate the annual birth and death of the sun, there is evidence of rites connected with the sun in a neighbouring part of New Britain. In one district of the island of Vuatom, in Valaur, and at one place on the mainland of New Britain, a festival takes place when the sun has reached the southern limit of its course"⁷). By this feast the people intend to regulate the course of the sun in order to hasten the beginning of the beautiful season, and for this purpose certain kinds of magic are performed. The food remaining after the feast is offered to the sun⁸). Here, I think, the possibility of the magical character of this feast being the principal object should not be excluded. But however this may be,

1) The new moon is greeted in Buin with a beating of drums, and there are also a certain number of moon myths. See THURNWALD 878 I 315 f, 327 ff, 331 f, 881 133 f, 883 525, 889 327. And the new moon is heralded on the Shortland Islands also. RIBBE 714 163. The Nasioi inland people offer sacrifices to the moon. FRIZZI 273 9. 2) See BLACKWOOD 76 533 f. 3) Regarding a story of the sun and the moon in Buka and North Bougainville, see BLACKWOOD 77 76-78. 4) See BLACKWOOD 75 215 f, 76 21 f, 196-200, 204 ff, 244. PARKINSON 630 658 ff, 638 252, TAPPENBECK 854 128, etc. 5) 727 435. 6) 727 434, 725 II 513. 7) RIVERS 727 434, 725 II 514. 8) MEIER 548 706 ff.

to conclude from this isolated feast, which has only its seasonal character in common with the Dukduk, that there is any association between the Dukduk and sun cult, is in my opinion extremely audacious. The attempt to attribute the Dukduk to the megalithic culture on the basis of a presumed connection of these ceremonies with the sun cult is also contradicted by another fact: According to traditions, the Dukduk came to the Gazelle Peninsula probably from Duke of York Island. In Duke of York Island, it was said that the Dukduk became known only a few generations ago¹⁾; and in his work *Bilder aus der Südsee* published in 1904, SCHNEE records p. 323 that the Blanche Bay people informed him that when they were small boys, the Dukduk did not exist in their region. PARKINSON²⁾ says in 1907 that the Dukduk is a "comparatively recent invention... a society not yet a hundred years old". Now, this would be much too recent a date if the Dukduk had any relation to the stone-using immigrants. On the other hand, it tallies well with the period of the Melanesian immigration, which we have seen was much more recent in the neighbouring regions. This recent existence of the Dukduk has led RIVERS to suppose that the Tamate liwoa must be as recent as the Dukduk, and that both may have come from Polynesia, whereas the other Tamate societies and the Ingiet were brought by his kava-people³⁾. This is a really striking accumulation of speculative theories with which, however, we need not deal here. In any case, the recent existence of the Dukduk excludes its connection with the megalithic culture and, in these circumstances, the question of a possible association of the Dukduk or the Rukruk with sun cult is of no particular interest to this work.

According to a tradition of Vuatom, mankind descends from the sun and a crab⁴⁾. Because of certain linguistic characteristics of the Valaur people who have the sun feast, MEIER⁵⁾ has inferred that they represent a special tribe. In the neighbouring regions, I am only aware of a myth of the North-west Baining according to which the sun and the moon created everything, including men, trees, and birds. The sun taught the people their language, to make gardens, fences, to build houses, and also gave them fire⁶⁾. Now, it will be remembered that on Vuatom, and in the district of the North-west Baining, the presence of the stone-using immigrants was evident from a certain number of prehistoric objects found. It is furthermore worth pointing out that the avenue-like road on both sides of which stone blocks were lying, and which we have associated with the avenues of the stone-using immigrants, was used on Vuatom only in connection with the sun feast. In these circumstances it is interesting to note that whereas the Valaur people themselves were ignorant of the origin of the sun feast, the neigh-

1) RIBBE 715 240. 2) 641 216, see also BURGER 114 12. 3) RIVERS 725 II 516 f, 524. 4) MAYER 544 700, MEIER 548 712. 5) 548 709 f. 6) BLEY 82 198, 200 f, BURGER 114 64.

bours of the Valaur stated that it had been brought by Pir¹⁾. We have seen that there are reasons for the suggestion that Pir was a stone-using immigrant, although we were unable to conclude this definitely. Should this suggestion be confirmed, and if the attributing of the sun feast to Pir was not just an explanation given by the natives on the spur of the moment, if further, the sun feast was in fact not merely sun magic, and if moreover the association of the North-west Baining culture hero with the sun was not due to syncretism, there would be a point here in favour of a connection between megaliths and sun cult, although this conclusion is based on considerations differing completely from those of RIVERS. There are, however, too many doubtful premisses in this argumentation, to permit us to draw any definite conclusion²⁾.

In Middle New Ireland and on some of the islands off the coast, the well-known sun malanggans are used and, at the end of the rites held in honour of a dead man, they are burnt together with the skull of the dead³⁾. It will be remembered that among the different beings which were credited with the creation of the malanggans there were also a few stone-using culture heroes, as for instance Moroa. But according to a myth of Bue village, the making of sun malanggans was discovered by a woman; the men, however stole her secret and killed the woman⁴⁾. Now, this is a story known in Melanesia in general and not typical of the stone-using immigrants. According to KRÄMER-BANNO⁵⁾, the sun is often identified with Moroa. We shall revert later to this point. Among the decorations of the men's house in Maron (south of Muliama) there was one representing the "eye of the sun"⁶⁾. NEUHAUSS⁷⁾, however, is definitely of the opinion that neither a sun nor a moon cult existed in Middle New Ireland⁸⁾.

It is remarkable that on the Trobriand Islands, Dobu and Rogeia, where the presence of the stone-using immigrants was clearly manifest, and where the moon plays a certain part, no traces of sun cult were found. It has already been mentioned that Austen attempted to conclude from the orientation of the stone-enclosures of Trobriand Island that there was some asso-

1) MEIER 548 710. 2) Regarding a moon myth of the Sulka, see PARKINSON 630 693, RASCHER 688 235. In the Gazelle Peninsula the new moon is hailed by shouting. THURNWALD 878 I 333. Regarding a myth of the sun and the moon of the Bolea, see KROLL 443 371, 373. 3) KRÄMER-BANNO 439 207 f, 280, fig. 110, 111. KRÄMER 438 67-72, 81, GROVES 307 240, Pl. II B, GRAEBNER-STEPHAN 300 118, 125, RIVERS 727 435, etc. etc. 4) KRÄMER 438 67 ff. 5) 439 280. 6) KRÄMER-BANNO 439 39, fig. 29. 7) 602 28. 8) Regarding myths of the sun and moon in New Ireland and Lir, see PEEKEL 645 9, NEUHAUSS 602 14 f, 20, 25. As is well known, many of the malanggans have been interpreted by PEEKEL as emblems of the moon. See PEEKEL 646 22, 34, 647 41 f, etc. etc. But as PEEKEL's interpretations of these malanggans are as fantastic as those he gives regarding myths, we must dismiss them as unscientific. Regarding the moon in decorative art see STEPHAN 842 35. The new moon is hailed by shouting. NEUHAUSS 602 28. On E Mira Island, house posts are often carved with representations of the moon, and the moon is also represented on combs. CHINNERY 147 163, 172.

ciation between these enclosures, the heavenly bodies and time reckoning. But in view of the complete absence of any definite data, this can only be qualified as unfounded generalization¹⁾. On Goodenough Island, where many traces of the stone-using immigrants were found, the sun is often painted on the houses and carved on the canoes²⁾. WILLIAMS quotes the opinion of R. A. VIVIAN who believes that the carved designs on the megalithic stones of Boianai "are of astronomical value". To this WILLIAMS simply remarks³⁾: "It does not seem credible that the exceedingly crude and unsystematic carvings of Boianai should have had any astronomical significance for the people who made them". But this argument is as little convincing as the opposing one. VOGAN⁴⁾ calls the analogous carved stones of Dogura and the other places on the north-east coast of Papua simply "sun-stones, almanacs or dials", but it is certain that the problem cannot be solved by such imagination à la ARCHAMBAULT. With regard to the meaning of the similar incisions on the analogous stones of the Bartle Bay stone-circles SELIGMAN⁵⁾ records: "Not much could be ascertained relative to the meaning of these. An isolated circle with a central dot on an incised stone of the Irere circle was called ubona and represented the "morning star", a scroll design upon the same stone had no name. A small circle with radiating hook-like processes at the bottom of the stone was considered to represent either a star or an eye. A cross on the back of this stone was said to represent a starfish". Whatever European observers imagine these designs to be is therefore of little interest; and although it is interesting to note what the natives say about them, even these native statements must be accepted with great caution, since this stone-work is no longer erected by the people of the present day who are therefore usually entirely ignorant of its meaning. Most of the native statements are therefore but impromptu explanations. Further myths of the stone-using immigrants would perhaps give a more definite answer to this question⁶⁾. On Mailu Island, before felling a sago palm, a spell is uttered in which the expression "sun spirit, sago spirit" occurs. SAVILLE, who records this, remarks: "This is the only occasion, in spell or in ordinary life and talk, that I have met the expression

1) In the Trobriand Islands the new moon is hailed by the children. MALINOWSKI 533 207. According to BROWN 102 37 a mother lifts her child up to the first full moon following its birth in order that it may grow fast. This practice, which is not mentioned by any other writer, is in any case but imitative magic and not moon cult. In Dobu, the moon is hailed by the children. FORTUNE 260 228, and on Rogeia Island "prayers" are said to the moon before the men start out for war. SELIGMAN 770 650. 2) Sun and moon are also mentioned in myths, and the new moon's rising is greeted by the children with loud shouting. JENNES and BALLANTYNE 416 159-161, 198, 417 49 f. 3) 950 151. 4) 910 100. 5) 770 466. 6) Regarding a myth of the origin of the sun, see SELIGMAN 770 378 f. For a myth of the origin of the moon in the Buna Sub-District and the north-eastern slopes of the Hydrographers Range, see AUSTEN 34 50 f.

"sun spirit" ¹⁾). BARTON ²⁾ gives the following, though not very clear record regarding the Koita Papuans amongst whom some more recent elements were also seen to exist, and in whose region a stone mortar appears to have been found: "All the heavenly bodies are more or less venerated, or, perhaps more correctly, may be said to be regarded with awe. The sun, moon, and morning star... are the chief ones. They only "yell" for the new moon" ³⁾). Further to the west, we have come across very recent and weak influences of the light-skinned inland people in the Elema District, the Purari Delta and the Papuan Gulf. Regarding the Motumotu, CHALMERS records that "at certain seasons the sun is worshipped... Near sunrise... as soon as the sun is seen they bend their heads... and pray to it" ⁴⁾). In Turoha village on the Upper Purari, HIDES ⁵⁾ was told by the people that the sun was their father and the moon their mother. But in view of his very imperfect knowledge of the language at that time this information needs confirmation. Myths of the sun and the moon are known on Kiwai ⁶⁾, but nothing is recorded of a cult of these heavenly bodies. The Keraki have special esoteric names for the sun and the moon which are used in magic and when relating myths, and the esoteric name of the sun may be used only among initiated males ⁷⁾. The sun belongs to one of the moieties, but nothing else is recorded regarding this, and WILLIAMS emphasizes that in the mythology the sun plays a much smaller part than the moon ⁸⁾.

1) SAVILLE 765 89. Regarding a myth of the sun and the moon, see SAVILLE 765 194 f. The new moon is heralded by shouting. SAVILLE 765 68, 194. 2) Quoted by SELIGMANN 770 193. 3) For a myth of the sun and the moon of the Motu, see ROMILLY 738 134-142, KRIEGER 441 310 f, CHALMERS 127 175 f; the new moon is hailed by them. SELIGMANN 770 193. For a moon myth of the Sinaugolo and Ipi tribes, see SELIGMANN 770 303 f, HOLMES 395 195 f. A carved wooden board of Roro representing probably the moon, suggests Gulf influence. SELIGMANN 770 273. 4) A myth of the sun is also known. The moon is "worshipped". CHALMERS 127 171 f; this information is also quoted by WIRZ 966 361, MACKENZIE 521 284, KRIEGER 441 309. The new moon is heralded. CHALMERS 127 182. In many club houses of the Purari Delta and some neighbouring regions of the Papuan Gulf, a small disk of palm spathe can be seen fastened to the posts. These disks are often circular, painted white with lime and are sometimes called "moons". They seemed, however, to possess no special significance and were said to be no more than ravi decoration. But the story has it that the original of these had been set up by two women as a means of illuminating the ravi interior at night. But when the hero Iko came out of the west and found the shining "moon" in the ravi, he took it away and whisked it up into the sky. WILLIAMS 945 231, 262 f. This story is of some interest in so far as we have considered Iko as a representative of the stone-using immigrants. But no definite conclusion can be drawn from this myth. WIRZ has considered some of these disks as emblems of the sun, which shows how indeterminate all these interpretations are. See WIRZ 969 101. In the Purari Delta the new moon is hailed and prayers are said to the moon. WIRZ 969 101. 5) 712 (1931/32) 14. 6) See LANDTMAN 457 25, 52 f, 101 f, RILEY 724 326, WIRZ 969 26. 7) WILLIAMS 942 384, 387. 8) WILLIAMS 942 384, 946 71. For a myth of the sun and the moon of the Kukukuku see BLACKWOOD 78 219 f.

It will be remembered that little stone-work was found in the Huon Gulf, but the influence of the stone-using immigrants was evident from prehistoric finds, myths, and the racial characteristics. The Bukaua look upon the sun and moon with fear and awe and address them as "Sir". Both are considered as creators of mankind, and offerings were formerly made to them ¹⁾. The Jabim and Tami also address the sun and the moon as "Sir", and by the Labo and Tami they are considered as the creators of mankind ²⁾.

The Abelam who, it will be remembered, show clear influence of the stone-using immigrants, cast a spell for the growth of the yams in which the moon, sun, ancestors, etc. are invoked to look after the yams ³⁾. The Iatmul tribe where the presence of the stone-using immigrants was found to be so clearly manifest, is divided into two moieties, the sun moiety and the mother moiety. The clans of the sun moiety tend to have the sun, stars and clouds for their ancestors and to place their ancestral pigs, canoes, etc. in the sky. The clans of the mother moiety connect their ancestors with the earth ⁴⁾. Although this conception of the sky is very significant, there appears to be no visible association between the stone-work of the Iatmul and the sun. And the culture heroes of the Iatmul whom we have considered as representatives of the stone-using immigrants, show no connection either with the sun, the sun moiety or the sky ⁵⁾.

With regard to the western part of the north coast of the Mandated Territory, the influence of the stone-using immigrants has been inferred from the use of sacred plants, the mythology and the racial characteristics. After the harvest, when the people of the But District pile up big heaps of yams, they take a long sago leaf and call upon the rising sun to make the

1) During a lunar eclipse offerings are made to the moon to hasten her reappearance. LEHNER 486 399, 431, 487 3, 489 110 f., 492 98. 2) CHINNEY 146 29, BAMLER 44 493, KRIEGER 441 184. When there is a lunar eclipse the Tami bring offerings to the moon, BAMLER 44 493. For very similar myths of the sun and the moon current with the Bukaua, Tami, Kai of the Sattelberg and Kai of Cape King William, see BAMLER 44 493, KEYSSER 428 159, STOLZ 844 261, LEHNER 492 99, 110. The Jabim and Bukaua greet the new moon with shouting. LEHNER 492 99, 489 113, ZÖLLER 989 270. The new moon is hailed also in Astrolabe Bay, Kadda and Dschanschimbi. ZÖLLER 989 270. For a certain kind of magic in connection with the sun on Graged Island, see RESCHKE 713 78. 3) KABERRY 423 355. It has already been mentioned that the Abelam hold dances around a white stone in the centre of the dancing ground. This stone is called mbabmu-matu, i.e. moon-stone, but nothing else is recorded of it. The moon is furthermore considered as one of the most important "wale", i.e. the spirits of the streams and springs. Sometimes the moon is painted on carvings of birds and human figures, it is associated with a myth, and the new moon is hailed by the villagers. KABERRY 423 346, 358. 4) BATESON 48 289, 49 256 f., 403. 5) Of the Kaup, who belong to the Nor Papua, THURNWALD mentions "masks for a moon dance" (877 362) without, however, giving further details.

yams heaps rise as high as the sago leaf is long ¹). But this is magic and not sun cult ²).

It will be remembered that in the Admiralty Islands, the Manus and the Jap people are believed to be the descendants of the children of a light-skinned woman and the sun to which, according to the Mantankor myth, she went. The question has already been posed whether this "sun" was not simply one of the antagonistic brothers whom Meier declared to be the sun. We shall revert to this again later ³).

We have seen that on the northern coast of Dutch New Guinea the megalithic culture did not extend further to the west than Lake Sentani; all the analogous elements existing farther west were found to be due to Indonesian influence. Most fantastic records have been given by earlier writers regarding the astral cult in Dutch New Guinea. WIRZ ⁴) has rightly condemned these hypotheses, such as, for instance, that of J. WEYLAND who connected certain types of hair-dressing of the Papuans "met een soort van veneratie voor de zon". According to WIRZ, the village names Tobadi, "sun village", or Wariori, "sun river", are of no particular importance either. In Humboldt Bay, painted wooden disks of various colours used for decorating the men's and cult houses, were frequently considered as sun emblems. These wooden disks are found in Tobadi, on the coast east of Cape Bonpland, and particularly in some of the villages on Lake Sentani; they were formerly common on the Schouten Islands as far as Doreh Bay, Roon Island, Numfor and Biak. On the two latter islands they are called "kop", a word used to designate every round or disk-like object. Since neither the word for sun nor that for moon is used for these disks, WIRZ thinks that they had nothing to do with the sun or moon ⁵); and after having discussed all the existing evidence he draws the conclusion "that none of the theories regarding a former sun and moon cult on the north coast of New Guinea can stand up to criticism" ⁶).

1) GERSTNER 279 256. 2) The Tumleo and Jakumul have a moon myth. The Jakumul call on the moon for help in magic. They have also an esoteric name for the moon, and a certain kind of sago must not be eaten, since it is connected with the moon. MEYER 561 427, 440 f. 3) For moon myths of Lambutjo and of the Admiralty Islands in general, see THURNWALD 878 I 327, PARKINSON 630 710 ff, MEIER 545 939. On Lambutjo the new moon is hailed by shouting. THURNWALD 878 I 333. 4) 967 40, 966 355. 5) WIRZ 967 28, 40-48, 966 326 f, 355-369, 972 34, 969 101, 971 50 f, KRIEGER 441 379 f, FINSCH 236 352, 442a 141, etc. etc. 6) WIRZ 967 40-48, see also v. d. SANDE 753 313, LORENTZ 501 44. For sun myths of Tobadi see WIRZ 967 48 f. A much greater part is played by the moon; the new moon is heralded in Humboldt Bay, on Biak, Numfor, and by the Marind anim. In Humboldt Bay and on Lake Sentani new-born children are lifted up to the growing moon in order to make them grow quickly, and somewhat similar customs exist on Numfor and Biak. WIRZ rightly remarks that this is but imitative magic and has nothing to do with moon cult. On the estuary of the Mamberamo, the new moon is greeted with shouting, and prayers are said to it. MOSZKOWSKI speaks therefore of moon "cult". 586 324 f, 587 951. For moon myths of the Numfor, Tobadi and

The Gari dema is mentioned in the myths of the Marind anim, amongst whom the last vestiges of the megalithic culture in western New Guinea have been found to exist. The Gari impersonator wears a semicircular fan-like decoration on his head, dyed with lime and ocre. The myths do not explain the meaning of these decorations, but WIRZ is of the opinion that they are perhaps emblems of the sun. WIRZ points out that in the Torres Islands a similar head decoration is worn in certain ceremonies. There, this decoration is called Dari or Deri which, according to WIRZ, is connected with Gari¹). I am not aware of any other records regarding astral cult in the Torres Islands²).

In Fiji, as has been shown, the presence of the stone-using immigrants, is manifest. The Nanga, which was seen to have been introduced by a dark-skinned group of Melanesian immigrants, is compared by RIVERS to the Polynesian Marae; and on the basis of this resemblance he argues that since the Marae was devoted to the worship of the sun, the Nanga must also have been the scene of sun cult³). To this HOCART⁴) has rightly remarked: "Before we can accept Dr. Rivers' reasoning, let us see what it makes of our own temples. Notre Dame in Paris is a Gothic structure; Westminster Abbey is in the same style. Notre Dame is dedicated to Roman Catholic worship; therefore Westminster Abbey is also Roman Catholic. This we know to be contrary to facts. That is quite enough to deprive Dr. Rivers' argument of all force". With the light-skinned stone-using immigrants no traces of sun cult can be discovered either, and DEANE⁵) in fact says of Fiji in general: "There is no solar cult"⁶).

This survey, which contains a number of cases which cannot be considered as sun "cult", and which are only included for the sake of completeness, shows that direct associations between sun cult and the stone-using immigrants are extremely rare in Melanesia. In some cases the existence of sun cult or, more correctly, what could be considered to be the traces of a former sun cult, coincides with the existence of the megalithic culture, but there seems to be no visible functional or genetic connection. In many regions in which the presence of the stone-using immigrants is clearly manifest, no traces at all of solar cult are found. It is much to be regretted that information regarding the orientation of the megaliths is so scarce in Melanesia, though from this alone it would be insufficient definitely

Dorch, see WIRZ 967 49-52, HASSELT 346 102, V. D. SANDE 753 179, KRIEGER 441 405. On Kei Island, offerings are made before a voyage is undertaken, and the sun and moon are invoked. GEURTJENS 284 350.

1) WIRZ 964 218. For a Marind anim myth of the sun, see WIRZ 968 IV 74, 76-78. The myth according to which Geb became the moon, has already been mentioned, as has also the fact that the new moon is heralded. See WIRZ 968 II 46 ff, 967 47.

2) See also 711 VI 287. Only the myth of a man who journeys to the sun and moon is recorded in Dauan, and a few moon myths are known. 711 I 42, VI 4, WIRZ 975 268 f. 3) RIVERS 727 442 f, 725 II 429. 4) 370 456 f. 5) 183 28. 6) For a tale about the moon known on Kambara Island, see THOMPSON 864 49.

to deduce astronomical associations. This is admirably demonstrated by the example of the Nangas of Fiji which are arranged in an east-west direction, although the Nanga has not the slightest connection with astral cult. A few of the Buin dolmens are lying in an east-west direction, but this does not apply to the majority; and the actual traces of sun cult are connected precisely with the non-megalithic Mono-Alu Melanesians. This shows that no definite conclusion can be drawn from the Melanesian evidence regarding a connection between sun cult and megalithic culture. On the other hand, there are several reasons for a possible connection between sun cult and the culture of the later coming Melanesian immigrants, although the acceptance of such a view gives rise to some difficulties too. We shall not discuss this opinion here, since our present study does not deal with the culture of these Melanesians. The view that there is a connection between sun cult and megaliths in the other areas of Oceania cannot, in any case, be applied to Melanesia, if only for the reason that such views are not even generally accepted for those regions which they concern. Thus HEINE-GELDERN¹⁾ is of the opinion that in South-East Asia and that part of Indonesia which he has studied, a connection between sun cult and megaliths is exceedingly doubtful.

Another argument might be brought forward in favour of the connection between sun cult and megalithic culture. FROBENIUS in his *Flegeljahre der Menschheit* has interpreted the numerous stories of Tagaro and Qat as astral myths. But SPEISER, one of the best experts on the New Hebrides, remarks: "How far he is right I do not dare to decide"²⁾. In the course of this study a number of further examples have been found, in which the culture heroes of the stone-using immigrants were brought into relation with the sun or the moon. We shall now discuss these cases.

LAWRIE³⁾ states that the culture hero Inhugaraig of Aneitym was a sun god, since he also had another name in which the word "nangesenga", i.e. "sun" appears. Now, if this is so, it is possibly due to late Polynesian influence which, as we have seen, is very strong in this island. MACDONALD records that in Fate, Maui's wife, Lei Mauitikitiki, was the moon, which story differs from the Polynesian version wherein Hina, the moon, is Maui's sister; in the Tangaroa story the moon is mentioned as Tangaroa's wife⁴⁾. We have, however, clearly shown that these culture heroes of Fate were human characters and had many features in common with numerous other analogous culture heroes who showed no association with the heavenly bodies. Here again, it is possible that these associations are due to Polynesian influence. Regarding Kabat, the Mewun myth (Malekula) relates that: "Every morning he used to climb up to the east, to be in the sunshine because he was cold. And every day he followed the sun round until it sank"⁵⁾. But nothing else is recorded either in Mewun or in the other

1) 350 314. 2) 789 361. 3) Quoted by CAPELL 121 80. 4) See CAPELL 121 69.
5) DEACON 184 629.

regions of Malekula. On Atchin, the culture hero Ta-har, who is identical with the Tagaro of the other islands, was identified, as we have seen, with the sun or the moon. In the adultery story of the two antagonistic brothers Barkulkul and Marrélül of Pentecost, the latter brother is called "le divenue blanc". This might possibly point to the moon, since in the analogous adultery story of the Pentecost brothers Tortali and Ul, Tortali is said to be responsible for piloting the sun, whereas Ul (i.e. "moon") is the pilot of the moon. Regarding Tanganggoa Tenga'a of Renell Island who is identical with Tangaroa, LAMBERT says that he is the sun, and Tamaihina "the Hina, or Sina or Ina of other groups is the moon"¹), but he does not trouble to prove this statement. The "Delectable Lizard" of Mala ran along the sky; but this incident was only part of the story of the lengthening of the tree into the sky, and the later descent to the earth so often found in the myths of the stone-using immigrants, but showing in these myths no association with the heavenly bodies.

THURNWALD records a myth of the culture hero Bego Tanutanu whom we have qualified as a typical representative of the stone-using immigrants in Buin and the Shortland Islands; in this myth the fight between Bego and his brother Baubiage is related. First they fight with spears, but since they do not hit one another, Bego throws a tree-fern at Baubiage. Fearing the revenge of his brother, Bego leaves his former home Bubuguna in the east of Buin and goes westward along the coast of Buin to Ciuai on the western border of Buin, where he now lives. According to other versions, after travelling along the coast in a westerly direction, he settled down in Dakuruai, Motuna, or in Guitubarau in the vicinity of Motuna²). Although the cause of the quarrel is not the typical one of the many other stories, it is nevertheless probable that we are faced here with the analogous theme of the fight of the antagonistic brothers. Now, THURNWALD has given the following interpretation of Bego Tanutanu³): "It might be possible to explain Tanutanu as a sun hero, since he is associated with the tree-fern the shoots of which... are interpreted as the rays of the sun. Also the fact that he is said to have gone from Bubuguna in the east to Ciuai, Dakuruai and Motuna in the west of Buin, points to a movement from east to west. The probable reason why Tanutanu was considered as a culture bringer is the fact that the growing of the food plants yams and taro is attributed to the effect of the sun... Baubiage is also identified with the chief in the moon". We must first remark that it is pure speculation to draw any allegoric conclusions from the use of a tree fern by Tanutanu, the more so as in another myth mentioned, Tanutanu himself is said to be the creator of the sun and the moon. Moreover, the east-westerly migration along the coast of Buin on which THURNWALD bases his conclusions, is, in fact, but part of the much wider migrations of Tanutanu; for this hero went first from Alu to Fauro and

1) LAMBERT 455 146. 2) THURNWALD 878 I 334 f. 3) 878 I 335 f.

then back to Alu; from Alu he paddled over to Buin, and it was only then that his westerly migration began, passing typically along the coast. These facts make it highly probable that this migration was actually a historical event. This view is furthermore confirmed by the fact that the children of the human couple created by Tanutanu, i.e. the descendants of Tanutanu himself, followed closely the route taken by their ancestor, since they too migrated from Alu to Mono, Fauro, Choiseul and Buin. It must therefore be concluded that Tanutanu was, in fact, human in character, and previous considerations have revealed the numerous reasons for considering him as a stone-using immigrant. If, on the other hand, THURNWALD states that Baubiage was also identified with the man in the moon, there is nothing to prove that this is not a subsequent interpretation.

It had already been mentioned that KRÄMER-BANNOU regarded the culture bringer Moroa of New Ireland as a sun god, whereas in PEEKEL's opinion this is a moon myth. From this alone it is evident how shallow are the foundations on which these assumptions are based. NEUHAUSS moreover, is of the opinion that there exists neither a sun nor a moon cult in Middle New Ireland.

The speculative attempts of P. O. MEYER, who was at great pains to interpret Wunekau of the Aitape District as the sun, and Tenal-Pisin as the moon, have already been rejected; and it has been proved that both these beings are representatives of the stone-using immigrants.

Regarding the culture bringer Kambel of the Keraki, whom we have likewise considered as a stone-using immigrant, the confusion in the traditions has already been emphasized. In some versions, Kambel's son was considered as the moon, and his wife was considered as the sun; in others Kambel himself is the moon, or Kambel is the creator of the sun and the moon. Moreover, it has been shown that all these beings were human in character, so that we came to the conclusion that many different conceptions must have intermingled, and that the associations with the heavenly bodies are probably of a secondary nature.

WIRZ wonders whether Mangundi of the western part of Dutch New Guinea is perhaps an old sun god, since he introduced fire to Numfor¹⁾. As, however, the introduction of fire is likewise attributed to a great number of other culture bringers who have no associations whatever with the heavenly bodies, there is no reason to conclude that this is so in the case of Mangundi.

The Mantankor myth of the sun and the moon has clearly been seen to deal with the antagonistic brothers.

This survey shows that most of the opinions expressed regarding a connection between the culture heroes and the heavenly bodies are based upon unjustifiable interpretations. I think we can accept SPEISER's opinion

1) WIRZ 971 50.

when he says¹⁾ in reference to the explanations given by W. SCHMIDT²⁾: "Only few will be able to follow him in his astral interpretations. It would be good if the astral interpretations which unfortunately have been accepted integrally by Peekel, could be established scientifically. In the manner presented to us they give an impression of pure fabrications, since the many ways in which the moon is said to appear leave the field open to the wildest fantasies. Probably no field-worker has ever found a living astral mythology in Melanesia, which is not to say that it might not have existed there once. Where direct information is not forthcoming from the natives, one is entitled to demand a serious scientific foundation for astral interpretations. Unfortunately, the idea seems to have gained favour that the mythology of Melanesia is mostly of an astral character. When this is proved scientifically no scholar will refuse to accept it, but only then". Nobody has denounced more severely and more sarcastically these assumptions than MALINOWSKI who says³⁾: "In folk tales the sun is sometimes personified, but actually figures there only in a few fairy tales, told for amusement merely... As to any cryptic or symbolic appearance of the sun in any other story, perhaps it might be found by some arm-chair philosopher belonging to the famous "Natur-mythologische Schule", but an intelligent native, or even anthropologist, would only smile at it". This study has shown that many of the culture heroes are actually immigrants, a point of view totally neglected also by MALINOWSKI. They are representatives of the stone-using people, and have certain racial characteristics in common; they introduced the same type of culture in the whole of Melanesia, they migrated generally in a west-easterly direction, similar incidents are related by the myths dealing with them, their arrival dates back a certain number of generations or to a period which can at least be relatively determined. From this it is evident that the culture heroes cannot be advanced as proof of a connection between sun cult and megaliths.

1) 799 464 f. 2) 829. 3) 533 205.

IV. THE PROBLEM OF POTTERY

Our investigation has shown that the prehistoric potsherds found at many places in Melanesia must be attributed to the culture of the stone-using immigrants; for these immigrants were either recorded by the myths as being the introducers of the prehistoric pottery, or the potsherds were found in dolmens, stone-enclosures or other megaliths, and finally, the distribution of prehistoric potsherds in Melanesia coincides with that of megaliths. A further survey of the data already quoted is not necessary. All the potsherds of which the technique is actually known were made by the coiling method. Even shape and decoration show striking resemblance thus confirming the view that we are, in fact, faced with a relatively uniform type of pottery belonging to one and the same culture. In many cases in which recent coiled pottery occurred, we were able to show its mythological connection with the stone-using immigrants too, or it was at least evident that the distribution of the present coiled pottery coincided with the megalithic culture. From this we have drawn the conclusion that the coiled pottery, prehistoric as well as recent, belongs to the megalithic culture. Now, this opinion is in complete contradiction to that expressed by SCHURIG who, in her study on the pottery of Oceania, expresses the view that the present coiled pottery belongs to the Papuan culture, whereas the modelling method is Melanesian. SCHURIG's opinion has generally been accepted. More recent information could be added to the data compiled by SCHURIG, but the distribution of pottery as indicated by her would not thereby be greatly modified. SCHURIG's work is without doubt an excellent and exhaustive study of the distribution of pottery in Oceania, but part of the conclusions she has drawn from the material are wrong. SCHURIG was unaware of the distribution of megaliths in Melanesia, and from the occurrence of the Papuan language in any specified region she decided that the culture was uniformly Papuan, without taking into consideration the possible complexity of such a culture. It must be mentioned that at that time SCHURIG was unaware of the technique by which the prehistoric potsherds were made, since it is only in the more recent literature that information on this point has been recorded. It was, in fact, principally on the basis of this prehistoric coiled pottery and its mythological connection with the stone-using immigrants or its actual connection with megaliths, that we reached the conclusion that the coiling method in general must be attributed to the megalithic culture. But even on the basis of the data compiled by SCHURIG herself, one reaches the conclusion that the coiled pottery of to-day must belong to the stone-

using immigrants. For that purpose we reproduce here the maps prepared by SCHURIG¹⁾. SCHURIG mentions present-day coiled pottery at the following places: Port Moresby (besides modelling method) (Melanesian language); Mailu (Papuo-Melanesian language); Yodda Valley (Papuan language); Teste Island, Tubetube Island, Utian, Pana Udiudi (Papuo-Melanesian language); Amphlett Islands (Papuo-Melanesian language); Goodenough Island (Papuo-Melanesian language); Wanigela (Melanesian language); Orokaiva (Papuan language); Nassau Bay (Melanesian

MAP VI



The geographical distribution of pottery in Melanesia (after SCHURIG).

language); Laukanu (Melanesian language); hinterland of Astrolabe Bay (Papuan language); Gogol-Nuru Plain, Hilu (Melanesian language); Sepik (Papuan language); Potter's River (Papuan language); (the information is uncertain regarding coiled pottery on the Ramu River and must therefore be disregarded²⁾); Jakumul (Melanesian language); Tumleo,

1) Instead of using numbers to indicate a specified place, as on SCHURIG's maps, we have given the names of the places. 2) SCHURIG has knowledge of a few pots of the Ramu River and merely because of the primitive shape and the texture of the material she assumes that the pots were perhaps made by the coiling method. SCHURIG 841 71. Since moreover some of the pots resemble those of the Sepik, she thinks that they have perhaps been imported from the Sepik (841 21). The other sources of information—more recent for the most part—record only the use of pots on the Ramu River, but not the making of pottery. See MOYNE 588 148 f, GEHRMANN 278 27 f, KIRSCHBAUM 431 204, etc. It is only among the Bosman tribe that Lord MOYNE records the making of pots, 588 123, but he does not indicate the method used.

Seleo, Sissano (Melanesian language); Sia (Melanesian language) ¹⁾.

Now, even these data from New Guinea alone, as sketchy as they are, should have warned SCHURIG against drawing any definite conclusion; for this compilation deals with seven tribes with Papuan language, eight tribes with Melanesian language and six tribes with Papuo-Melanesian language. And it may be remarked that, with the exception of the language, neither racial nor cultural conditions have been taken into consideration. To conclude from this distribution that the coiled method is Papuan, is completely arbitrary. When SCHURIG found that the modelling method belonged to the Melanesian culture, a conclusion which we unhesitatingly accept, she rashly concluded that the coiling method which she found with some Papuan tribes, could only be Papuan. She must therefore have been ignorant of a third culture, or omitted taking it into consideration. The distribution of the coiled pottery in New Guinea alone is sufficient to refute her opinion, and it will be seen that its occurrence in the rest of Melanesia is even more prejudicial to SCHURIG's view. If the coiling method were Papuan, it would be impossible to explain why, in the immense region of western New Guinea—including the wide inland area, the Papuan area par excellence—pottery is entirely unknown. A single glance at SCHURIG's map is sufficient to realize this fact. On the other hand, SCHURIG ought to have been aware that the Papuan tribes which make coiled pottery—with the exception of the Yodda tribes, Sepik and Potter's River people—, either live on the coast or on the islands off the coasts. Now, in all the places where the coiling method is used, we have found traces of the stone-using immigrants: Among the Melanesian Motu, light-skinned elements, characteristic mythological themes and, on Dauko Island, prehistoric potsherds, were proof of the presence of the stone-using immigrants; among the Papuo-Melanesian Mailu the presence of the stone-using immigrants was found to be evident from the racial characteristics, the myths, the use of sacred plants, stone-cairns and prehistoric potsherds; in the Yodda Valley stone mortars and stone pestles, an obsidian axe, clay figures and the use of sacred plants testified to the presence of the megalithic culture in this region; our knowledge of Teste, Tubetube and the other neighbouring islands is not very wide, but the stone-grave found on Tubetube, the existence of megaliths on Rogeia, Samarai and Sariba, as well as the connection between Tubetube and Normanby make it highly probable that Tubetube and Teste have both been influenced by the stone-using immigrants. On Goodenough Island, the presence of the stone-using immigrants was found to be evident from the many megaliths, the racial characteristics, the myths, the use of sacred plants, etc.; stone-work was found on the Amphlett Islands, and this group was seen to be closely connected, both racially and culturally with Trobriand and Dobu where the presence of the

1) SCHURIG 841 65-71.

stone-using immigrants is likewise manifest; in Wanigela, part of a stone mortar was found besides many prehistoric potsherds made by the coiling method, and in Collingwood Bay, which has cultural relations with Good-enough Island, the use of sacred plants was also found. The presence of the stone-using immigrants is furthermore confirmed by the mortars, pestles and potsherds found on the neighbouring Cape Nelson and the Musa River. Light-skinned individuals were found among the Papuan speaking Orokaiva, and although no stone-work has been recorded, stone mortars and pestles, stone images, prehistoric potsherds, the use of sacred plants and the mythology were seen to be clear proof of the presence of the stone-using immigrants in this region. On the Mambare River, and particularly in its vicinity, mortars, pestles, stone-figures and certain clay objects were found. It may, however, be mentioned that SCHURIG knows of only one pot from the Mambare, and it is only on account of its pointed shape that she concludes that it was made by the coiling method ¹⁾. Jaduna on the Lower Waria: all along the river, light-skinned individuals were found side by side with dark-skinned people; the culture and race of the coast resembled the Orokaiva, and there was close contact with the Mambare; records about stone-work are vague, but on the upper river a stone mortar was found and sacred plants were used; if, in addition, the cultural conditions of the neighbouring regions are borne in mind, the presence of the stone-using immigrants is probable here too. Nassau Bay, Laukanu: in the wider region of the Huon Gulf, the racial characteristics, the use of sacred plants, many typical myths, many stone mortars and pestles, earthenware rings and prehistoric potsherds are clear proof of the presence of the stone-using immigrants, although present-day stone-work is not very abundant. Astrolabe Bay, Gogol-Nuru Plain: no stone-work was found, but the use of sacred plants, many typical myths and, in some ways also, the racial characteristics of the Melanesian and Papuan tribes of Astrolabe Bay, prove the influence of the stone-using immigrants. On the Sepik the well known anthropomorphous coiled pottery is made in the third culture province which we have learned to be one of those areas in which the influence of the stone-using immigrants is most manifest; this influence was seen to be evident from the racial characteristics, and perhaps also the linguistic conditions, from abundant stone-work, the use of sacred plants, a stone mortar, potsherds which are perhaps prehistoric, the myths, etc. etc. This area is one of the most striking examples of the erroneous conclusions to which mere lists of distribution such as those prepared by SCHURIG, can lead. In these lists only isolated elements of the culture are selected, but the real character of the culture is overlooked. On the Potter's River, where Papuan languages are spoken, we have been unable so far to discover any influence of the stone-using immigrants, but this may be due

1) 841 68, 103.

to the scantiness of information. It has, however, been seen that, according to THURNWALD, the Potter's River was "obviously exposed to waves of Melanesian invasions", so that here too the culture is not as uniformly Papuan as SCHURIG has supposed. It has been seen that trading and cultural relations existed with the Lower Sepik, and since the presence of the stone-using immigrants is manifest on the islands off the coast, influence from this direction might be presumed. But this too would only be hypothetical, since no traces of the megalithic culture have been found on the Lower Sepik. On the other hand, nothing is known so far regarding any relations between the Potter's River and the third culture province of the Sepik, neither is anything known regarding relations with the Schrader or Bismarck Ranges. A solution of the problem of coiled pottery in this region will therefore only be possible when more is known about the area. In the region of the Melanesian Tumleo, Jakumul and Sissano, the last area of western New Guinea from which coiled pottery is recorded, the influence of the stone-using immigrants is apparent from the racial characteristics, the use of sacred plants and the mythology.

In the area outside New Guinea, SCHURIG mentions the making of coiled pottery in the following regions. Admiralty Islands: the centres of pottery in this archipelago are Mbuke Island in the south and Haus Island in the north; from these centres pots are traded to all parts of the archipelago. The coiling method is used on both these islands, and the modelling method is also used on Haus Island¹). It has already been noted that Mbuke is inhabited by the Manus, and Haus by the Mantankor; but whereas the Manus language is Melanesian in type, no unanimity exists regarding the languages of the Mantankor and Usiai which, by some writers, are considered as Melanesian and by others as Papuan. If the old classification of Usiai, Mantankor and Manus is right, and the Usiai be actually the oldest group, it is significant that the Usiai are ignorant of the making of pottery²). SCHURIG herself has admitted³) that her scheme cannot be applied to the Admiralty Islands when she says: "proofs are still lacking to allow of attributing the coiled pottery to the language and culture of the Papuans, and that made by the modelling method to the language and culture of the Melanesians in the Admiralty Islands". Now, we have shown that the stone-work, the racial characteristics, the use of sacred plants, the existence of stone mortars and prehistoric obsidian objects as well as many typical myths prove clearly the presence of the stone-using immigrants, and we have reached the conclusion that the Mantankor are the representatives of the megalithic people. Thus it is easy to attribute the modelling method to the Melanesian Manus, and the coiling method to the stone-using immigrants. This view is also strengthened by the myth already mentioned crediting the megalithic culture-bringing

1) SCHURIG 841 71 83 f, PARKINSON 630 356 ff, 389 f, VOGEL 911 92 f, p. 93, NEVERMANN 608 236-239, 302, 332, BÖRNSTEIN 85 317, etc. etc. 2) See PARKINSON 630 380.
3) 841 106.

snake with the introduction of pots, although the type of pottery is not actually specified in the myth. It is, however, astonishing, in these circumstances, that both the modelling method and the coiling method are used by the Mantankor of Haus Island, whereas the Manus of Mbuke used the coiling method only. I can suggest no other explanation for this fact except the relative uniformity of the culture of all three groups brought about by the exceedingly intense trading relations between them.

SCHURIG then mentions the use of the coiling method in Buka Island ¹⁾. Here the language is Melanesian. Mention has been made of the megalithic stone-work which abounds in this region, and the presence of the stone-using immigrants was furthermore seen to be evident from the racial characteristics, stone pestles, the use of sacred plants and many typical myths. The language of the Shortland Islands Mono, Alu and Fauro, where coiled pottery also exists ²⁾ is Melanesian. Information more or less precise has been mentioned regarding stone-work on all the Shortland Islands and, as we have shown, megaliths are particularly abundant in Buin where, in the dolmen-graves, prehistoric potsherds have been found. Moreover, stone mortars and pestles, and the use of sacred plants, are recorded in the Shortland Islands and Buin, the mythology of both these regions is particularly rich in typical themes, and Bego, the megalithic culture hero of the Shortland Islands and Buin, was described as possessing pots. Coiled pottery is also found among the Nasioi. They speak a Papuan language, but, as has been seen, stone-work and the use of sacred plants was found with them. On the other hand, SCHURIG ³⁾ mentions the use of the modelling technique among the Toberoi, whom we have seen to be Melanesian Mono-Alu settlers.

With regard to the many finds of prehistoric coiled pottery in the New Hebrides, we have already demonstrated in detail that the mythological indications, the fact that potsherds were found in the dolmen-graves, and that the distribution of the prehistoric potsherds coincides with that of megaliths, point clearly to the conclusion that the prehistoric coiled pottery belongs to the megalithic culture. Recent pottery is made only on Santo, viz. by the modelling method in Wus, and by the coiling method in Pespia. The language of Santo, and of the New Hebrides in general is Melanesian. SCHURIG, who attributes the modelling method of Wus to the Melanesians, in which she is certainly right, has here no other choice but to attribute the coiling method to the short-statured people of the island ⁴⁾. It has, however, been seen that the separation of the "Kleinstämme" of the New Hebrides as an independant race is by no means proved and that SPEISER eventually inclined to believe that they are but an inland branch of the Melanesians of the coast. On the other hand, we have seen that it was precisely in

1) 841 73 with many references. 2) See SCHURIG 841 73, 106. 3) 841 73, 85.
4) SCHURIG 841 106 f

North-west and West Santo, i.e. in the area in which also Pespia lies, that light-skinned elements were found as far as north of Wus; and we have concluded that they came from the Northern New Hebrides, and that they introduced stone-work. The presence of the stone-using immigrants was furthermore seen to be evident from the various types of stone-work in the other districts of the island, from the use of sacred plants, the existence of the Suqe and from the mythology. This leads to the conclusion that, whereas the modelling method of Wus was brought by the Melanesians, the coiling method of Pespia can only have been introduced by the stone-using immigrants.

In discussing the coiled pottery of New Caledonia, SCHURIG relies upon the opinion expressed by BUSCHAN that Papuan elements are also found in New Caledonia¹). We have, moreover, mentioned that FRIEDRICH MÜLLER thought the languages of Maré and Lifou to be of Papuan type, but the more modern scholars hold the view that the New Caledonian language is an archaic Melanesian language, an opinion which is generally accepted to-day. A group of short people in the west of New Caledonia show some affinities with Australia, but certainly not with the Papuans, and there is no reason to suppose that Papuans formerly existed on this island. On the other hand, because of the occurrence of stone-work, stone pestles and other prehistoric objects, the use of sacred plants, terraced irrigation, etc. we have proved the presence of the stone-using immigrants on this island; and we have mentioned the reasons for attributing the coiled pottery to those stone-using immigrants who, from the Sepik, migrated to New Caledonia.

With regard to the pottery of Fiji, SCHURIG mentions that the coiling method is used by the people of Malaki Island "who have been driven away to Nasava village" and it is used perhaps also in Nasava village and Koro on the opposite coast of Viti Levu; the coiling method is furthermore used on the islands of Kandavu and Ono. On Mbau Island and in the neighbouring Rewa District, the modelling method is used²). Since in Fiji, there is no record of any Papuan elements, SCHURIG is completely at a loss how to apply her theory that the coiling method belongs to the Papuan culture, so all she says is³): "The statement that the Fijian inhabitants of Malaki (now in Nasava) who make coiled pottery were the first who invented pottery, perhaps points to the greater age of the coiling method".

Now, in reality these data regarding the distribution of the different methods of pottery in the Fiji Archipelago are extremely significant, for we have seen that all places where the coiling method is used are dwelling places of the stone-using immigrants: Malaki Island, where fortifications consisting of stone walls and ditches were found, was, according to the myths mentioned, discovered by those people whom the stone-using im-

1) SCHURIG 841 107, BUSCHAN 117 II 188. 2) See SCHURIG 841 77, 85 f, CUMMING 176 247 f, 177 363 f. 3) 841 107, see also CUMMING 176 247.

migrant Lutunasombasomba had sent out in search of his lost carved stones. From there they went to the mainland opposite, where, it will be remembered, they met Ndengei, the other stone-using culture hero. Ndengei had migrated from Vunda via Tavua and Nathilau to Nakauvandra, which place we have seen to be the very centre of the stone-using immigrants. Now, Korovu village lies between Tavua and Nathilau and Nasava lies on the coast east of Nakauvandra. Apart from the expulsion of the Malaki potters to the mainland, I know of no further record concerning the history of Malaki Island. We have, however, seen that it was the stone-using immigrants who, under the pressure of the later coming Melanesians, were forced to abandon their former dwelling places, and this gives further strength to the view that the fleeing Malaki potters were none other than the stone-using immigrants withdrawing before the pressure of the later coming Melanesians. In Kandavu and Ono Island, the other centres of the coiled pottery, light-skinned people have been found who, as we have shown, could be none other than the stone-using immigrants; in fact several tribes of Kandavu traced their origin back to Nakauvandra the centre of the stone-using immigrants, and the spirits of the dead of both these islands go to Nakauvandra; terraced irrigation was found on Kandavu, and the stone-using culture hero Tanovu of both these islands was described as being in possession of a big water pot. For these reasons, here, again, we can attribute the coiled pottery to the culture of the stone-using immigrants. On the other hand, it has been seen that Mbau, where the modelling technique is used, was the dwelling place of the later coming Melanesians who settled down on this island after having driven out the stone-using Levukans; from Mbau Melanesian influence spread to the neighbouring regions, to the Rewa District also among others, particularly in more recent times. It is therefore natural to attribute the modelling method used on Mbau and in the Rewa District to the later coming Melanesians. It is quite probable that the tradition according to which the Malaki people were the first to invent pottery (i.e. the coiled pottery) points, as SCHURIG has inferred, to the greater age of the coiling method. This, however, does not mean that the coiling method belongs to a Papuan people unknown in Fiji, but that it must belong to the stone-using immigrants who were precisely the more ancient people in this archipelago. On the other hand, the greater age of the coiled pottery is additional proof that the stone-using immigrants who introduced this type of pottery were actually the earlier comers in the Fiji Archipelago.

Our investigation thus shows that, in spite of the exhaustive character of her work, SCHURIG was wrong in part of her conclusions. If she is right in thinking that the modelling method belongs to the culture of the Melanesians, the coiled pottery on the other hand, must be attributed to the stone-using immigrants. This applies not only to the prehistoric coiled pottery, but likewise to the recent coiled pottery. And in spite of many dissimilarities,

particularly in ornamentation, between the prehistoric and the recent coiled pottery we can conclude that the recent coiled pottery is but a perpetuation of the prehistoric pottery, and that its modifications are accordingly due to the various racial and cultural intermingling of its introducers, the stone-using immigrants, and apparently also to a development of its own. In these circumstances, it is of the utmost importance that, as already pointed out, coiled pottery is also found on Yap and Palau, that on Ponape a potsherd was found together with an obsidian spear head, and that on Guam, prehistoric pottery was used in connection with a type of burial characteristic of the megalithic culture, for these and many other elements led us to the conclusion that the stone-using immigrants must have come to New Guinea and the rest of Melanesia via the Admiralty Islands from Micronesia. That the coiled pottery in the whole of Melanesia actually forms a relatively homogeneous element belonging to one and the same culture is moreover confirmed by the fact that it is alike, to a certain extent, even in shape and function. Without treating this problem in greater detail it may be pointed out that anthropomorphs are frequent in the decoration of the prehistoric pots of Malekula, the recent coiled pottery of New Caledonia, of the Sepik, etc.; frequently the pots are of very large size, as in the case of the prehistoric pots of Malekula, Aoba, Ambrym, Wanigela, or the recent pots of the Sepik, etc.; and in many cases they were used as sepulchral pots, as on Malekula, Ambrym, Murua, Marshall Bennett Islands, Trobriand Islands, etc.; and SCHLAGINHAUFEN¹⁾ has suggested that some of the big antropomorphous jars of the Sepik may also have been used as sepulchral pots.

It further ensues from our investigation that the Papuans originally had no knowledge of pottery at all, which explains why in the west, south and the interior of New Guinea—the very centre of the Papuan tribes—pottery is completely non-existent. This might seem to be a somewhat surprising conclusion, since the Papuans have a neolithic culture, but it is quite consistent when it is recalled that it was the stone-using immigrants who introduced the pig and numerous food plants, and that the Papuans were previously ignorant of these things. The Papuan culture must therefore be considered as belonging to the early Neolithic. If, as PITTARD is inclined to believe²⁾, the pig, in chronological succession, was the last of the animals to be domesticated in European Neolithic, this would mean that in Europe too, the pig belongs to the later Neolithic, which would, in fact, constitute fresh proof of the synchrony of the European and Oceanian Neolithic.

Now, if the coiled pottery belongs to the culture of the stone-using immigrants, we are again faced with the old problem—the reason for the complete lack of pottery in Polynesia, to which area the stone-using immigrants migrated after having passed through Melanesia. It should be emphasized, however, that this problem would arise no matter to what cul-

1) 815 39. 2) 662.

ture the coiled pottery is attributed; for SCHURIG also maintains, in contradiction to PARKINSON, that in their original home, the Polynesians were well acquainted with the art of pottery¹). GRAEBNER supposes that the Proto-polynesians were not ignorant of the use of pottery, but that they lost this art owing to the lack of proper material in the Polynesian islands which are generally of coral formation²). SCHURIG does not agree with GRAEBNER on this point nor does she give much credence to the reasons advanced by various other writers. SCHURIG quotes a few earlier writers recording the existence of pots on Easter Island and Makatea, but she doubts the accuracy of this information³). PERRY, however, takes it for granted that the former inhabitants of Easter Island made pottery⁴). Pots found on Namoka and Tonga are declared by SCHURIG⁵) to have been imported from Fiji; but it should be mentioned that a great number of pots herds have also been unearthed on Tonga⁶), though we do not know their age. I am not prepared to discuss this problem any further, since only thorough archaeological investigations in Polynesia would be likely to throw some light upon it. According to our present knowledge, the lack of proper material in Polynesia seems to me to be one of the most probable causes of the loss of this highly useful art. From the non-existence of pottery in Polynesia, PARKINSON⁷), has concluded that the Polynesians on their migrations did not touch New Guinea, since they would otherwise have adopted the making of pottery there. But the conclusions we have reached show that this opinion cannot be defended. If it is true that the stone-using immigrants came to Melanesia earlier than the Melanesians, they must have come into an area inhabited by Papuans who, according to our reasoning, were ignorant of the use of pottery. Such a useful art is very likely to have been partly lost in such a cultural environment, and it is easily conceivable that this environment, combined with the lack of necessary material, may have led to the total disappearance of the art of pottery in Polynesia⁸).

1) SCHURIG 841 5. 2) GRAEBNER 298 746, quoted also by SCHURIG 841 4. 3) 841 2. 4) PERRY 649a 32. 5) 841 2 f. 6) See MACLACHLAN 523 266. 7) 630 552 f, quoted also by SCHURIG 841 5. 8) HEINE-GELDERN and FÜRER-HAIMENDORF both agree that the transition to the Neolithic in Australia is due to an infiltration of the round-axe culture from New Guinea into Australia. To explain the non-existence of pottery in Australia, FÜRER-HAIMENDORF says (440): "Vielmehr scheint bei den nach Australien eingedrungenen neolithischen Kulturen eine rasche Degeneration eingetreten zu sein, welche ebenso in der Verschlechterung der Steinwerkzeuge wie in dem Verlust der Töpferei und des Pflanzenanbaues zum Ausdruck kommt". If, however, as we have shown, the Papuans had but a poor knowledge of agriculture and no knowledge of pottery at all, then the absence of these two cultural elements in Australia can very well be reconciled with an infiltration of the round-axe culture, the representatives of which, in New Guinea, are certainly Papuans, and we do not need to have recourse to a process of degeneration at least as far as the non-existence of the art of pottery is concerned.

V. THE PROBLEM OF QUADRANGULAR AXES

Great surprise was aroused among anthropologists by the discovery, in the Mt. Hagen-Wahgi area, of axes differing completely in shape from the usual Melanesian axes. The lateral sides of these highly polished, often very large and thin axe blades, are squared, so that they have a flattened, oblong, quadrangular section, like the Indonesian and Polynesian axes. This is the type HEINE-GELDERN has called "Vierkantbeil", as opposed to the usual Papuan axes which are elliptical or round in section, and which HEINE-GELDERN calls the "Walzenbeil". These square sided axes are used as ceremonial and battle-axes. The shafted axes are T-shaped¹⁾. According to ROSS and VIAL, the Mt. Hagen ceremonial axes are not made in the Mt. Hagen region, but come from the Jimi River. One of the quarries from which the stone for these axes is broken is situated on the Ganz River, a tributary of the Jimi River, and natives engaged in making these axes were seen by Leahy also north of Mt. Jaka. According to CHINNERY, the Mt. Hagen axes are made in the villages of Gumbigai and Mangarvigar in the Manginbor area. TISCHNER records that the collector to whom the Hamburg Museum owes the Mt. Hagen axes, is of the opinion that they are made in the Wahgi Valley. In the Mt. Hagen area, the use of these axes is recorded among the Janga, Mogeï, and Benembi; and south of the Nabilya River the axes classified as weapons are probably the same type of battle-axes as those of the Mt. Hagen District. Farther to the south and south-west, these axes are found in the Sambrigi Valley, the area of the "Grasslanders" and on Lake Kutubu. In Kutubu, only the rougher utility implements are imported from the "Grasslanders", and they also have squared sides and are of oblong section; many of these battle-axes were found in the Wahgi Valley and on the Chimbu River, a tributary of the Wahgi. According to our present knowledge the eastern limit in the distribution of these battle-axes is formed by the Marifutiga River, a tributary of the Lower Wahgi; here the natives stated that the axes came from the west, i.e. higher up the Wahgi River. Lord MOYNE and KIRSCHBAUM found that these battle-axes were used by the Aiome pygmies, and they were both informed by the pygmies and the neighbouring Ramu people that the axes were made by the Aiome themselves. HADDON, however, doubts the accuracy of this statement, and

1) The stone-blade is wedged between two pieces of wood and held together by cane lashings, and bound on to an elbow-shaped haft with cane. A wooden blade continues backwards in the opposite direction to the stone-blade as a counter-weight.

since the Mt. Hagen axes are more elaborate and thinner than the Aiome axes, HADDON thinks that either they were copied by the Aiome, though in a somewhat inferior manner, or were traded eastward to the Aiome from Mt. Hagen. In any case, the Ramu people (here these axes were found in Atemble) get these axes from the Aiome; they are furthermore found on the Upper Potter's River, and it is highly probable that here too they are imported from the Aiome. From whatever place they originally came, it is certain that they are an important article of trade, for there is a similar stone blade from the Sattelberg (in the Neuchâtel Museum), and stone blades from the Mt. Hagen District have found their way down the Kikori River in Papua¹). It might further be recalled that among the rock-paintings of the Finsch Haven hinterland, a few axes were represented which PÜHOFER considered as being of a type similar to the Mt. Hagen axes, but we are not sure of this, since the possibility of European axes having served as a model cannot be definitely excluded. It has already been mentioned that, at Wagava in the Sogeri District, a small broken blade with squared edges and of oblong section was found together with prehistoric potsherds. Also the axe blades unearthed together with stone pestles, mortars, and stone figures on the Upper Watut seemed to be of this type, although there was no detailed description of them.

It is of course by no means certain whether the data quoted by us cover the whole of the area of New Guinea over which the quadrangular axes have spread, particularly since this part of the island has been opened up only recently. No scholar has attempted so far to define the culture to which these axes belong, and with regard to the axes of the Mt. Hagen-Wahgi-Aiome area, HADDON says²): "We are thus faced with a problem of which I can at present offer no solution. It is, that in the centre of New Guinea, and nowhere else in the island, except for a few sporadic diffusions, there is a highly specialised type of stone blade which must have had its origin in Indonesia. When and how it came there it is impossible to say at present. Perhaps other elements of Indonesian culture will be found in the newly opened up grasslands of central New Guinea".

Now, HEINE-GELDERN has shown that the "Vierkantbeil" belongs to the "Ur" Austronesians, whose culture is characterized by the possession of megaliths, the custom of head-hunting, the domestication of pigs, etc. Reconstructing their ways of migration, HEINE-GELDERN has shown that these people went from China to South-East Asia and the Malayan

1) MOYNE 588 XXII f (HADDON), 169-171, 173, Plates 49, 53, MOYNE and HADDON 589 270-272, 274, 286 f, Pl. XX Nr. 1, TISCHNER 893 27 f, 34-46, 64, ROSS 744 347, 351, Pl. III fig. 5, 6, Pl. II, CHINNERY 143 190 Pl. H fig. 1, 153 409, LEAHY 473 242, 246, 248, 260, LEAHY and CRAIN 474 159 f, 169, 183, 186, 233, Pl. p. 192, WILLIAMS 953 93, 994 132, 145 f, 712 (1938/39) 48, 50, fig. 4, VIAL 904 158-163, Pl. p. 162, BRAUNHOLTZ 91 95, MURPHY 594 39, KIRSCHBAUM 431 210, VICEDOM 907 12 f, 23, Pl. III fig. 1, HIDES 358 105, 113, 115, Pl. XVI, BEAVER 55 258, SPINKS 805 224). 2) In Lord MOYNE 588 XXIII.

Archipelago. From there, one wave migrated over Sumatra, Java, the Sunda Islands, etc. to the east and to New Guinea, constituting the "Melanesian" Austronesians, whilst another wave migrated over Borneo, the Philippines and Formosa finally reaching Japan. In the area between Formosa, the Philippines and Northern Celebes, these Austronesians intermingled with the Austroasiatics, from which intermingling originated the Polynesians who, passing through Micronesia and Melanesia, finally came to Polynesia¹). Now, we have already proved the presence of the stone-using immigrants at all the places of the interior of New Guinea where the "Vierkantbeil" is found; and although knowledge of this area is in its infancy, it is clearly evident that in this area the distribution of the stone-using immigrants and quadrangular axes coincide completely. In the Sogeri District, where Papuan elements were seen to exist side by side with people of non-Papuan racial type, the quadrangular stone blade was, significantly, found together with prehistoric potsherds thus testifying to their stratigraphical connection; and in the whole of Melanesia, we have attributed prehistoric potsherds to the culture of the stone-using immigrants. It has furthermore been seen that Sogeri is situated in a region which has been crossed by the stone-using immigrants in their east-westerly migration. No definite explanation has yet been given regarding the prehistoric finds of the Watut River, though it is possible that these objects are due to contact with the Upper Waria, thus forming the most northern traces of the stone-using immigrants crossing New Guinea. From these facts we can draw the conclusion that the quadrangular axes were brought to New Guinea by the stone-using immigrants who originally came from Indonesia, went to New Guinea via Micronesia, and finally reached Polynesia. This explains why the "Vierkantbeil" of Indonesia, Micronesia²), and Polynesia, is also found in the interior of New Guinea³).

The following considerations perhaps furthermore strengthen the assumption that quadrangular axes belong to the megalithic culture. Nobody, as far as I can see, has so far compared the quadrangular axes of the interior of New Guinea with the well known ceremonial axes of the Massim District⁴). The blades of these latter are also flat, very thin, well

1) HEINE-GELDERN 349 584 f, 600, 609, see also ANDERSON 18 256 ff. 2) Here, stone axes have been superseded to a great extent by shell axes. See HEINE-GELDERN 349 584 f. 3) The blades of greenish opicalcite found with potsherds, carved shells and bones in Wanigela, were not of the square sided type, and differed from the present type of stone blades in that they were smaller and not so heavy. One of the blades photographed by SELIGMAN and JOYCE 777 330 f, Pl. IX fig. 1, 2, is, however thin, flat and of oblong outline. The little blade which was dug up on Misima from a depth of five metres lower than the obsidian spear-head already mentioned, was triangular in outline and of rounded section. But owing to the frequent landslides and the alluvial character of the soil in many parts of Melanesia, the stratigraphical determinations are very unreliable; too much importance should therefore not be attached to single finds unaccompanied by any other typical objects. 4) This statement needs correction, since, as I have seen after this study had

polished all over, and often very large, agreeing, functionally also, with the square sided axes of New Guinea in being ceremonial axes and, at the same time, as will be seen, battle-axes. The lateral sides it is true are not squared and the corners are not rectangular, but more or less rounded. But it is certain that they cannot be classified with the usual Papuan axes which are of elliptical or round section, and they are in some respects at least, very similar to the typical quadrangular axes. It is well known that these ceremonial Massim axes, which are too large and thin to be used as tools, are made on Murua Island from the stone quarried in the neighbourhood of Suloga. Some of them are traded via Tubetube, but the greater number is exported westward to the Marshall Bennets and Trobriand Islands, whence they are brought to the Amphlett and D'Entrecasteaux Islands. From the latter, they pass eastward as well as to south-east New Guinea (Milne Bay, Bentley Bay, etc.) and to Suau, Mullins Harbour and Mailu Island on the south coast. Since these blades are also an article in the Kula trade, they have spread over the whole of the Kula area and, in addition to the places already mentioned, they are also found in Dobu, Rogeia, Teste, Egum, Tokuna, Gawa, Kwaiawata, Kitava, Nada, Panniet, Misima, Sudest, and Rossel Island¹). We can thus see that the distribution of these ceremonial axes as well as of the New Guinea battle-axes, coincides with the area in which the presence of the stone-using immigrants is manifest. But there are also mythological indications showing that these Massim axes probably belong to the megalithic culture. It will be remembered that, according to the Rossel Island legend, Mbasi and all the snake gods of the Mbasi kind were armed with greenstone axes probably of the Massim ceremonial kind²). Now, we have shown that Mbasi and the snake gods are representatives of the stone-using immigrants. It will further be remembered that, on Sabari Island in the Calvados Chain, relics were found of the stone-using culture hero Tamudulele, the brother of Mbasi; one of these relics was his tomahawk, but we are not told what shape it was³).

already been completed, HÖLTKER in his article (395 b 726 ff) published in 1944, is inclined to believe that the Massim axes are a derivation of the quadrangular axes, an opinion, which, as he says, is also shared by Professor F. SPEISER. HÖLTKER insists that this personal opinion based on purely typological considerations has to be backed by culture-historical arguments in order to be valid. The following analysis, it will be seen, contains some of these historical arguments.

1) The handles differ from those of the New Guinea battle-axes, the blade being set directly into the handle and fastened with cane. There is a great deal of information regarding these axes. See POWELL 681 21, FINSCH 236 212, 237 f, 282, Pl I Nr. 8, 238 II 14, 28 f, Pl. XX fig. 1, SELIGMAN 770 15, 513, 517 ff, 530-534, 584, 633, 669 f, Pl. 61, 62, 775 8, 776 53, SELIGMAN and STRONG 778 348 ff, 352 ff, MALINOWSKI 525 90, 99, 148, 166, 287, 358, 367, 501 f, 507, Pl. LIX, 526 526, 623, SAVILLE 765 41, 162 f, 242 ff, ARMSTRONG 25 30, 67, 74, 113, 159, 166, 712 (1921/22) 28, MORESBY 580 202 f, PARKINSON 630 230 f, fig. p. 231, BROMILOW 99 127, ROMILLY 739 138, etc. etc. 2) Loc. cit., and ARMSTRONG 25 XXVI (HADDON), 131, 26 2. 3) In Montague Harbour, on the south coast of New Britain, PARKINSON found two wooden clubs which seemed to be imitations of the Massim ceremonial axes. See PARKINSON 630 230 f,

It has furthermore been mentioned that in a dolmen-grave of Buin, THURNWALD found prehistoric potsherds together with axe blades of which he says ¹⁾: "Some of the potsherds recall those of certain areas in south-eastern Asia as exhibited by Dr. Heine-Geldern ²⁾. The same is true of the axe blades". The question has already been asked whether these axe blades are the „Vierkantbeil" type; THURNWALD's remark is too indefinite to infer this with certainty ³⁾. On Yasawa Island north-west of Viti Levu, polished hatchets were found, three of which were gouge-shaped and of elaborate finish, as already mentioned, but nothing else is recorded regarding these hatchets. Of 44 axe blades of the Lau Islands which THOMPSON studied, a third had a rectangular cross section, or what THOMPSON calls western Polynesian type, whereas the others had a curved cross section, or what she calls the Fijian type ⁴⁾. Since, on Fiji proper, the quadrangular type does not exist its occurrence on the Lau Islands must be due to more recent Polynesian influence, which we have seen to be very strong in the Lau Islands ⁵⁾.

Our investigation has thus shown that the quadrangular axes which, up to the present, constituted one of the unsolved problems of Melanesia, belong to the culture of the stone-using immigrants.

fig. p. 230. Since this place is situated almost due north of Trobriand, an axe may have come to Montague Harbour from the Trobriand Islands, where it served as a model. But this is too isolated a case to permit of any conclusions being drawn.

1) 674 216. 2) 349. 3) Quadrangular axes were found on Nuguria where the people, in race, culture and language, are a mixture of Micronesians and Polynesians. See PARKINSON 631 109, Pl. XI fig. 6, 11; with regard to the race and culture see PARKINSON 631 105 f, 638 203, 630 523 f, 534, BURGER 113 165, RAY 705 50, FRIEDERICI 272 290, etc. But this island beyond Melanesia is of minor interest to us. SARASIN records a few oblong chisel-like blades of Maré and New Caledonia, with parallel lateral sides, not very thick, but not of rectangular section. See SARASIN 758 117, Pl. 22 fig. 2, 3, 8, 9-11. 4) THOMPSON 862 101 f. 5) It might be pointed out that in the myths of the Banks Islands Mota, Mota Lava, and Venua Lava, Qat is described as using a shell axe (see CODRINGTON 160 159, 161, 163, COOMBE 170 97, 99, 107), and in view of the actual distribution of shell axes in Melanesia this is perhaps not without significance. We shall, however, not deal with this question in this work.

VI. THE RELATION BETWEEN THE "KAVA-PEOPLE" AND THE MEGALITHIC CULTURE

RIVERS, to whom, as is well known, we owe the conception of the "kava-people", is of the opinion that the megalithic people represent a particular branch of the kava-people, and that they came to Melanesia later than the main body of the kava-people¹). Our discussion regarding the distribution of kava in New Guinea has led to the conclusion that there is no connection between kava and the stone-using immigrants, but that kava forms part of the culture of the Melanesians. It is remarkable how rarely the introduction of kava is mentioned in the myths of Melanesia. If kava were part of the megalithic culture, it would be inconceivable that mention of its introduction should not have been made in the myths of the stone-using immigrants in which the introduction of many food plants is so clearly described. On the other hand, it has been mentioned that Manumbu of the Bilibili myth whom we have considered as a stone-using immigrant, planted kava. According to the Marind anim myth, the stork dema introduced kava, but nothing else is recorded regarding this dema associating him with the stone-using immigrants. A certain number of culture heroes of the Trans-Fly region whom we have considered as representatives of the stone-using immigrants were likewise credited with the introduction of kava; thus Bidedu of the Bina people was described as the introducer of kava; Javagi, the grandfather of Bidedu, was said to have learned the use of kava from a kangaroo; the woman Ua-ogrerere of the Masingara also introduced kava; Kambel of the Keraki brought kava to the west and kava was brought by Ibari to the Gogodara. Our conclusion as far as this part of New Guinea is concerned was that the path of migration followed by the Melanesians who introduced kava has probably overlapped that of the stone-using immigrants.

Now let us see whether in the rest of Melanesia we have any reasons to assume a connection of kava with the stone-using immigrants. With regard to the Admiralty Islands, it has been seen that kava was introduced by the "Paluan" people, who were the most recent Melanesian immigrants, and who, according to BÜHLER, were even more recent than the Melanesian Manus whom RIVERS has identified with his "betel-people". On the other hand, it was the much more ancient Mantankor whom we have shown to be the representatives of the stone-using immigrants, so that the megalithic people not only had nothing to do with the kava-people as RIVERS supposed, but were also much more ancient than the latter and not, as RIVERS believed, later arrivals.

1) RIVERS 725 II 454, 575.

Before studying the rest of Melanesia, let us first consider the question on Fiji. In the Fiji Archipelago, the use of kava is very wide-spread. It is to be regretted that the sources of information speak mostly of "Fiji" in general with no precise indications as to the localities. Kava is used by the hill tribes and on the islands, as for instance on Kandavu, Ovolau, Mbau, the southern Lau Islands, etc. ¹⁾. RIVERS has pointed out that although the name for kava (yanggona) differs from that used in Polynesia the mode of preparation is the same as in Polynesia ²⁾. ERSKINE, on the authority of JACKSON who is not a very reliable informant, however, relates ³⁾ that the natives "said that previous to the visits of the Tongans, the Fijians did not know the use of angona, although they call it by that name, and looked upon it as useless weed". But THOMSON ⁴⁾ says: "Kava-drinking, indeed, seems to be so purely a Polynesian custom, that the Fijians might be supposed to have learned it from the Polynesians were it not for the fact that the yankona songs of the hill tribes are so archaic that the people have quite forgotten their original meaning. Thomas Williams says it was not in common use in Vanua Levu and part of Viti Levu in his time. The hill tribes of Viti Levu seem always to have used it... In former times the use of yankona in Fiji was purely ceremonial". The myths indeed do not contain a single hint permitting us to connect the use of kava with the stone-using immigrants or with the later coming Melanesians. But if kava is not due to Polynesian influence in Fiji—and we can take this for granted—and since, in view of the result obtained in the rest of Melanesia, there is nothing to support the view that it belongs to the megalithic culture it can only have been introduced by the later coming Melanesians; and it is this late appearance of the use of kava in Fiji which is responsible for the fact that in THOMAS WILLIAMS' time this custom had not become general in Vanua Levu and part of Viti Levu. We have clearly seen that the Melanesians settled down in the hills of the interior after having driven out the earlier stone-using immigrants, a fact which tallies with our view that kava is more recent than the megalithic culture and not the contrary as RIVERS thinks.

The use of kava is, furthermore, known in all the Banks Islands and all the New Hebrides with the exception of South and East Malekula, and the short people of Santo and Ambrym, where at least its use is not recorded ⁵⁾. RIVERS has drawn attention to the fact that, in the Banks Islands and in the Southern New Hebrides, with the exception of Erromonga, the word

1) See DUMONT 203 203, THOMPSON 864 16, 35, 54, 58, THOMSON 866 341 ff, 872 650, DEANE 183 75, CHRISTMAN 156 II 145, BREWSTER 93 17 f, 20 f, 267, WILKES 941 194, BÄSSLER 35 220, 242, 247, ERSKINE 231 257, 263, etc. etc. 2) RIVERS 725 II 244. 3) 231 439. 4) 866 341 f. 5) SPEISER 789 138, 162-165, 280, 285, 361, 790 113, 115, 792 144, 793 26, 73, COBRINGTON 160 141, 148, 181, 201 f, 208 f, 225, 351, 397, 407, DEACON 184 70, 185 463, 467, 505, RIVERS 725 I 86, 184, 211, HUMPHREYS 398 58, 81, 117, 138, 158, 179, 187, SOMMERVILLE 786 382, HARRISSON 344 333, ROBERTSON 731 393, CHEESMAN 138 91, 183, 195, 203 etc.

used for kava is the same as in Polynesia, whereas different names are used in the Northern New Hebrides. This coincides with the modes of preparation; for whereas in the Banks Islands and the Southern New Hebrides kava is chewed as in Polynesia, it is ground on a coral stone in the Northern New Hebrides¹⁾. From this SPEISER concludes that the use of kava must have come from Polynesia to the Southern New Hebrides where Polynesian influence is very strongly felt in the general culture²⁾. The question whether this conclusion applies to the Banks Islands also, is not touched upon by SPEISER. CODRINGTON³⁾ has stated that the introduction of kava into the Banks Islands is recent; he brings forward as evidence that the custom has not yet spread to Gaua, and actually maintains that kava was introduced from Polynesia. Against this RIVERS⁴⁾ only says that, according to J. C. PALMER, the use of kava instead of not having spread to Gaua has been given up by these people. But even if this were so, it does not necessarily follow that, as RIVERS purposes to show, the use of kava is old. THOMSON⁵⁾ has even expressed the opinion that the New Hebrides natives may possibly have learned the use of kava from labourers returning from plantations in Fiji. But in my view such a theory cannot be proved. It is, however, worth pointing out that the Pentecost myth regarding the origin of kava is similar to the story of Tonga, and for this reason RIVERS is of the opinion that this myth is probably not indigenous in Pentecost⁶⁾. RIVERS, who also attributed to his kava-people the introduction of the secret societies, brings forward as evidence that in the Torres Islands, Banks Islands, and some of the Northern New Hebrides kava is drunk in the gamal by men of certain Suqe ranks only, and often also in connection with the rites of the Suqe⁷⁾. Now, it has actually been seen that in the Suqe ceremonies of the Torres Islands, a kava root was laid before the door of the gamal symbolizing the kava-drinking in which the boys will participate in later life; in Santo, only men of high Suqe rank were entitled to drink kava in daily life, and a few cups of kava were poured on the body of a candidate in the Suqe⁸⁾. On entering a certain Suqe rank of the Sakaos, the candidate planted croton and kava; kava was not used by the short statured people of West Santo where the Suqe had hardly got a footing⁹⁾. In Big Nambas, (Malekula) women and men who have not entered the Nimangki society may not drink kava, but this is unknown elsewhere in Malekula, although kava was said to be used in the ritual of some high Nimangki grades in Seniang and in the ceremony of "Making man" in Mewun¹⁰⁾. But in view of the fact that we have not a single direct proof of a genetic connection of kava with the megalithic culture, I am of the opinion that no definite conclusion can be drawn from these few facts; it is

1) See RIVERS 725 II 244. 2) SPEISER 797 147 f. 3) 160 1 f. 351. 4) 725 I 86. 5) 866 341. 6) RIVERS 725 I 212, II 248. 7) See RIVERS 725 I 82 ff. 126, 185, 211. 8) SPEISER 789 409 from GLAUMONT; see also what has been said regarding the Wunapenini and Nogugu. 9) SPEISER 789 162, 297. 10) DEACON 184 373 f.

much more probable that the use of kava in connection with the graded societies is due to a subsequent intermingling. In fact, DEACON has not attributed the use of kava to his "Secret Society Culture" characterized also by the custom of erecting megaliths, but to his mat skirt culture immediately preceding the secret society culture. But apart from the fact that there is no reason, as we have already seen, for separating many of the elements of this mat skirt culture from the megalithic culture, it is probable that DEACON has merely followed RIVERS' scheme according to which the megalithic people are a later wave of the main body of the kava people.

In New Caledonia and the Loyalty Islands, the use of kava is unknown, although, according to Bourgairel, the kava plant was found growing in New Caledonia ¹⁾. This is remarkable only in so far as Polynesian influence has been at work particularly in the Loyalty Islands in a manner similar to that in the Southern New Hebrides. That New Caledonia has furthermore been influenced by the stone-using immigrants has already been mentioned.

In Vanikoro, certain ceremonies are held during which, in the presence of skulls, the people pray that their gardens may flourish. After this feast kava is drunk, and each man pours out the dregs praying to the skulls for a plentiful crop of kava ²⁾. Nothing is recorded of any connection between kava and the stone-using immigrants whose traces we have discerned in this island. It is moreover not improbable that the use of kava on this island is due to influence from Tikopia, where, however, kava is not drunk but used only as an offering to the ancestors ³⁾. CODRINGTON ⁴⁾ is actually of the opinion that in Vanikoro the use of kava is due to Polynesian influence. RIVERS ⁵⁾ has seen in the Tikopians the purest incarnation of his kava-people.

In the wide area of the Bismarck Archipelago and the Solomon Islands, where the presence of the stone-using immigrants is clearly manifest at many places, the use of kava is unknown except at San Christoval. BROWN ⁶⁾ records that the kava plant has been found in New Britain, by which he probably means the Gazelle Peninsula; "but the natives do not use it, as they all chew the betel nut". Regarding Laur (South New Ireland), ABEL records that piper methysticum is chewed together with betel ⁷⁾, but we cannot infer from this that this practice is due to former kava-drinking. Among the Arosi of San Christoval, kava-drinking was formerly customary in connection with certain burial ceremonies, "but with the coming of the betel nut, kava-drinking passed away" says Fox who gives this information ⁸⁾. Fox thinks that his megalithic immigrants Abarihu (whose later waves, in his view, are the Araha, Mwara, and Amaeo) are probably identical with RIVERS' kava-people ⁹⁾. But, apart from the information just

1) See SARASIN 758 66, ANDERSON 18 114, SPEISER 793 44, 55, 208, BRENCHLEY 92 344.
2) RIVERS 725 1 226 f. 3) FIRTH 243 5, 245 74, 77, 246 107, 114, RIVERS 725 1 312 f, 316 f, 324, 326, 333, 355. 4) 160 1 f 5) 725 11 409. 6) 103 100. 7) ABEL 12 713 Note 1. 8) 263 44 Note 1, 216 f, see also ECKARDT 208 349. 9) See Fox 262 43 f.

mentioned, nothing is known regarding the former distribution of kava-drinking in the island, its rôle in social life, its connection with the mythical beings, etc. FOX in expressing this opinion was therefore certainly influenced by RIVERS' scheme to which he endeavoured to adapt his own observations, and which he has closely followed in other respects also.

The opinion that "with the coming of the betel nut kava-drinking passed away" is also based upon RIVERS' theory that the kava-people preceded the betel-people. This view has actually been taken for granted by most writers on Melanesian culture. I shall not deal here with this problem in detail, since it does not affect the problem of this study. It should, however, be remarked that if BÜHLER is right in stating that the kava introducing "Paluan" people of the Admiralty Islands are even more recent than the Manus, this would contradict RIVERS' opinion of the antecedence of the kava-people, since RIVERS has considered the Manus as the representatives of his betel-people.

We thus reach the conclusion that the introducers of kava were Melanesians of very recent date (apart from those cases in which kava was brought from Polynesia); they are much more recent than the stone-using immigrants, with whom they are in no way connected. The study of the relations between the introducers of kava in Melanesia and those of Polynesia is not essential in the present work.

VII. WERE THE STONE-USING IMMIGRANTS CANNIBALS?

A FEW OTHER PROBLEMS.

This question, which has already been touched upon in the course of this study, will now be discussed at greater length. I am of the opinion that very little can be learned from the present distribution of the custom of cannibalism in Melanesia, and this is not surprising if the mixed character of Melanesian culture is borne in mind. There are, in fact, a few regions in which the presence of the stone-using immigrants coincides with the absence of cannibalism, as for instance in the Banks Islands, Santa Cruz, Alu, Mono, Fauro, Buin, etc. But, on the other hand, cannibalism is practised in many regions in which the stone-using immigrants were also found to exist. It has been seen that the stone circles at many places in the Massim District were connected with cannibalism as for instance on Rossel Island, Goodenough Island, Fergusson, in Milne Bay, Bartle Bay and Suau, although in some cases they existed side by side with non-cannibalistic stone circles. On one of the park-like dancing grounds of the Wage River, whose relation with the megalithic culture we have shown, a native endeavoured by signs to make it clear that cannibalistic feasts were held on this dancing ground. Owing to the imperfect means of expression, however, this information is not very trustworthy, nor does it follow that there is a genetic connection between these dancing grounds and cannibalism. Trenches paved with stones at the bottom and said to be used for the cooking of bodies, were found in the Tugi region, and in the Sambrigi Valley, a stone heap on which the bodies were cut up was found in front of a dubu. In New Caledonia, each stone in the row of stones found in the Diahot District represented an enemy eaten; a similar custom was found in Fiji. It has, however, been shown that the connection of these Fiji stones with cannibalism was of a secondary nature and probably due to the more recent Melanesian influence. It is therefore quite possible that in many other cases also the connection with cannibalism is of a secondary kind. Here again it is the myths alone which can give us more definite information. It has been seen that the Ambat of Malekula were not cannibals; the stone-using culture heroes Taufu of Suau, Samudulele of Mailu and the Wunekau brothers of the Aitape District substituted pigs for human victims, and were thus clearly not cannibalistic. On the other hand, To-Korvuvu of the Gazelle Peninsula, Je of Rossel Island, Sina Kwao of Malaita, the typical ogre slayers of the Orokaiva, Aua Maku of the Purari, Aramemb and Nazr of the Marind

anim and Kambel of the Trans-Fly region were described as eating human beings, or as the introducers of cannibalism. But of Aramemb it was said that after having eaten a man, he brought him back to life again, and Kambel's eating of a man was by error, since Kambel thought it was a wallaby and when he learned that he had eaten a man he was "very repentant". In the San Christoval story of Warohunuga, his brothers want to eat him, and finally they eat the eldest brother. But in my view it should not be concluded from this that they were cannibals, since in all the other analogous stories, including the Qat stories, such a connection with cannibalism does not occur. Since cannibalism is practised in San Christoval, Ugi, etc.¹⁾ it is quite probable that this incident of the story is a local and recent version, or that the connection with cannibalism has been added by the native informant. In Fiji, it has been seen that the gods were said to be cannibalistic, but that Ndengei once was so disgusted by the cooked bodies that he ordered that, in future, pigs should be offered instead of men, as was done by the stone-using culture heroes Taufo, Samudulele and the Wunekau brothers. We have therefore concluded that the stone-using immigrants of Fiji were likewise not cannibalistic.

This shows that the Melanesian evidence provides no definite answer to our present problem. We must, however, bear in mind the complex character of the Melanesian culture, and the fact that the culture of the stone-using immigrants as it is known to-day has certainly been submitted to many influences of the aboriginal Papuans and the later coming Melanesians. In these circumstances, it is all the more significant that many of the stone-using culture heroes are expressly stated to be non-cannibalistic even in those regions where cannibalism is actually practised, and we can therefore, in my opinion, conclude that in all probability the stone-using immigrants were not cannibals²⁾.

On the other hand, it has been seen that, on the Middle Sepik, a region where the presence of the stone-using immigrants is clearly manifest, the heads of killed enemies were placed upon the monoliths, and in some cases their bodies were buried under these stones (this same custom, it will be remembered, occurred also on Tiop Island). Sometimes some of the flesh of an enemy killed is laid beneath one of the monoliths, but the flesh is not eaten. On the ceremonial mound "Wak" too are laid the heads taken or the bodies of dead enemies and captives. The flesh of the head or the body is

1) See PARAVICINI 626 123, GUPPY 314 38, COOMBE 170 219, COBRINGTON 160 344, etc.

2) A similar opinion has been expressed by STRONG 712 (1920/21) 30. According to him, a group which he calls "primitive Melanesians" and which corresponds to our stone-using immigrants, were not cannibals, whilst the Papuans and the Negritos were. The occurrence of cannibalism in the case of the "primitive Melanesians", and the non-existence of cannibalism among the Papuans, he explains by reciprocal cultural influence. STRONG does not state upon what he bases this opinion, and it cannot therefore be accepted as anything more than a merely personal view. STRONG, in fact, declares that the subject requires further investigation.

buried in the ceremonial mound. Newly initiated boys are carried around the "Wak". It has already been pointed out that this perhaps represents a more ancient and original custom which, in those regions in which cannibalism was indigenous or subsequently introduced, led to an amalgamation with cannibalism. It has in fact been seen that some of the stone-using culture heroes were described as head-hunters; thus Sina Kwao of Malaita had a coir noose with which he strangled people; then he cut off the heads of his victims taking them home to his club house where he had a great collection of them. Rapuanate, the stone-using immigrant of San Christoval, Saa, Ulawa, Ugi, and the Three Sisters Islands, cut heads off with a shell; one of the snake gods of Rossel Island whom we have shown to be representatives of the stone-using immigrants, had a man catcher too; Enaja of the Kambriman on the Sepik River who seemed to be a stone-using immigrant, was the introducer of head-hunting; the immigrant god of the Iungazim of the Strickland River, who created the coconut also introduced head-hunting, and Nazr, the hero of the Marind anim, was a head-hunter too. On the other hand, there are a great number of culture heroes of the stone-using immigrants about whom nothing is recorded in connection with head-hunting. But here again, I am of the opinion that the traditions indicating such a connection are too frequent and too significant to be overlooked, and that a connection between head-hunting and the stone-using immigrants should accordingly be considered as very probable.

There are moreover a certain number of other elements of culture which have been attributed by various writers to the culture of the stone-using immigrants. RIVERS, who discerns two megalithic streams in Oceania—an older culture of dolmens, and a more recent wave characterized by pyramid-like stone structures—is of the opinion that the representatives of the dolmen culture interred their dead in the extended horizontal position, whereas in the pyramid-culture cremation was customary. He thinks that these two megalithic invasions of Melanesia and Polynesia were separated widely in time, and that the influence which originally added the practice of cremation to the megalithic culture was the Hindu invasion¹). The view that cremation in Melanesia is due to the influences of the Hindu colonization of Indonesia has also been expressed by GOEBEL in her study on cremation in Melanesia, whereas GRAEBNER, WIRZ and DOERR hold that the custom of cremation is very old²). LAYARD who, however, bases his considerations on Malekula only, has distinguished between an older dolmen culture and a more recent menhir culture, the first characterized by burial in the sitting position, the second by burial in the extended horizontal position. This study has shown that burial in the sitting position is actually typical of the megalithic culture in the whole of Melanesia, but that it should occur only in connection with dolmens is, according to the data given in this work,

1) RIVERS 725 ff 549, 580. 2) See GOEBEL 927 122 ff with many references.

rather doubtful; and it is equally doubtful from the data quoted, whether a dolmen culture can be separated as a distinct wave from the rest of the megalithic culture. On the other hand, burial in the extended horizontal position is so widely known in Melanesia and its connection with megaliths so vague, that only future investigations will perhaps be able to give a more definite answer to this problem.

Another problem is that of the home of the dead. As is well known, RIVERS ¹⁾, PERRY ²⁾, DEACON ³⁾ and some other students have attributed the sky home of the dead to the culture of the stone-using immigrants. Moss, in her exhaustive study of this problem ⁴⁾, has expressed the opinion that in western Indonesia this conception is due to Moslem influence; regarding the rest of Oceania she has not come to any definite conclusion, but has merely demonstrated the complex character of this problem. We shall not examine this question, but our study has shown that the sky is of very great importance for the stone-using immigrants; thus many of these immigrants were said to have come from the sky, others ascended to the sky, or they married a woman from the sky, etc.

ELLIOT SMITH, PERRY, CHINNERY and some other writers maintain that the stone-using immigrants on their migrations were attracted to certain places, and to the interior of some regions by the presence of gold, pearls, and other treasures. A great deal of trouble has been taken to show that the distribution of these treasures and of the stone-work of the stone-using immigrants coincide and it has been particularly emphasized that many stone mortars and pestles have been found in goldfields ⁵⁾. But none of these students had sufficient knowledge of the distribution of megalithic stone-work or of the stone-using immigrants in Melanesia for an investigation of this kind. Now, the knowledge which we now possess shows that the distribution of these treasures by no means overlaps the distribution of stone-work to the degree which these writers have supposed ⁶⁾, and wherever these two elements actually occur at the same place, their genetic connection is by no means proved. CHINNERY, who has likewise emphasized that many of the stone mortars and pestles were found in goldfields, has moreover expressed the opinion that these objects were used for crushing gold from quartz ⁷⁾. To this, MURRAY ⁸⁾ has rightly remarked that "if these immigrants knew how to crush gold from quartz on the Papuan mainland they knew more about mining than their Australian successors, for so far no Australian miners have succeeded in this... It may be doubted, therefore, whether the pestles and mortars ever had anything to do with gold-mining". This is also the opinion of STRONG ⁹⁾ who says: "Even the European has never

1) 725 11 550 f. 2) 561 119, 152 f, 180 f. 3) 184 710 f. 4) 584 78 ff.

5) See PERRY 650, 652, 653, 651 170 ff, CHINNERY 151 279 f, 290, JACKSON 412, 413, 414, 415, etc. etc. 6) See also the criticism expressed by MURRAY in 596 31, 598.

7) 151 286 f. 8) 596 31. 9) Quoted by MURRAY 596 31.

successfully crushed quartz for gold on the mainland of Papua; and if prehistoric wanderers have at all generally profitably worked gold in stone handpower mortars, surely the present-day miner, with the help of machinery, would long ago have found some of the sources of goldquartz, and Papua would have ranked as a great gold-producing country". In STRONG's opinion the mortars were used for the crushing of grain. But since, as even STRONG must admit, no trace of native cultivation of grain has been found up to the present in Melanesia, he has recourse to the completely unfounded hypothesis that the cultivation of grain has died out¹). Now it has been seen that Ambat of Malekula used his stone mortar for pounding his food, and this use is confirmed by the Eddystone myth according to which the stone-using immigrant Vanavana also made pudding in his mortar. These few indications are of infinitely more importance than all the conjectures, however logical and probable they may sound. As long as there is no indication to the contrary in the myths, there is not the slightest reason to suppose that the stone mortars and pestles have served any purpose other than that described in the myths. The rare cases in which stone mortars and pestles are still in use to-day confirm moreover the veracity of the myths. Thus, the big stone bowls of New Georgia are still used to-day for bruising nuts or hard food, the pestles of the South River are used in cooking, and during a feast pigs' meat was laid upon the stone vessels of the Mt. Hagen area, to mention only a few cases. These practices might of course be of a secondary nature, but their similarity to the use described by the myths gives particular weight to the conclusion that this must actually have been the purpose for which stone pestles and mortars were originally used.

CHINNERY's argument that the stone mortars and pestles must be connected with the search for gold, since they were found in gold fields, is likewise erroneous. As we have already stated our knowledge of the interior of New Guinea is not very wide, and this work shows how extremely rare are the excavations made methodically in New Guinea so far. The majority of mortars and pestles have been unearthed by goldminers, who are our only sources of information for large areas of the interior of New Guinea. These miners worked of course in the areas in which they had good reason to suspect the presence of gold, and it is only natural in these circumstances that mortars and pestles were found mostly in goldfields. There is no justification therefore for interpreting this coincidence as a genetic connection.

Neither is there any ground for assuming a connection between megaliths and pearls, pearl shells and cowrie shells. Not only do all these elements not entirely overlap in their distribution, a point of minor importance, but proofs of a genetic connection of these treasures with megaliths are almost completely lacking. There are moreover, in New Guinea for instance, very

1) STRONG in 712 (1920/21) 32.

few articles which have been carried so far by trade as cowrie shells, and this fact must of course be taken into consideration in lists of distribution.

These few indications may suffice since, as has already been mentioned, it is not intended in this study to criticize all the theories advanced by SMITH, PERRY, RIVERS, CHINNERY, etc., but to work out those elements of the megalithic culture of Melanesia which are immediately apparent from the Melanesian evidence.

VIII. SACRED PLANTS

A short remark must be added regarding the use of sacred plants which we have learned to be so highly characteristic of the stone-using immigrants. A few writers are of the opinion that the use of these plants is due to the widespread partiality for the colour red in Oceania and other regions¹⁾. RIVERS, instancing the use of red feathers in Santa Cruz, Gaua, and Meralava, the red money of the Solomons called "rongo", "sacred", the red money mats of Pentecost, the whales' teeth of Fiji rubbed with turmeric which were held to be more precious than the white, and the religious value of red feathers in Polynesia, draws the following conclusion²⁾: "This value attached to redness may be only an indication of the aesthetic appreciation of this colour which is so general among people of rude culture, but it is far more likely that it has a religious or magical significance"³⁾. FOX, probably following the idea of RIVERS, believed in a relation between the colour red and the megalithic immigrants Araha, and says⁴⁾: "Red seems to be the sacred colour of the Araha. Their canoes were marked by long red grass streamers. Their combs are similarly decorated, and the Airasi feast shows the Araha crowned with scarlet 'ere' ere and hunguhungu. In the Mwakomwako dance of the dead, a necklet of red ferns is worn; armlets of grasses dyed red (characteristic of Arosi and Marau, as red and yellow is of Malaita, and yellow of Bauro) are worn. On the front of the oha are painted bands of red, white and black, as also on the platform for the initiation of boys and for making them Araha. The first-fruits of yams put in the oha are painted with red and white lozenges. The lozenge tattooed represents, sometimes at least, the fruit of arite, a tree very prominent standing out as a russet red mass when its leaves turn. The bodies of Araha are painted with turmeric after death. The red shell-money is also connected with Araha". LAYARD has pointed out the frequent use of red leaves which, in Malekula, are used in the rites connected with initiation into sorcery. And following the theory of ELLIOT SMITH who emphasized the frequent use of red pigments in the mortuary practices of the Egyptians, he instances, in fact, the use of red colour as one of the reasons indicating relations between Malekula and Egypt⁵⁾: a lame reason indeed. LAYARD himself has drawn attention to the use of red ochre in Aurignacien burials,

1) See BEASLEY and JONES 54 380, 383, LEHNER 494 428, 445. 2) 725 II 390.

3) The Arosi, it will be remembered, gave the information that the red-leaved shrubs *amaranthus*, *coleus* and *dracaena* represent blood, and were planted in the gardens, since without blood the garden could not be fruitful. But this is a locally isolated interpretation by the Arosi people only, and is by no means general among the natives of Melanesia. 4) 263 298 f. 5) LAYARD 469 506-508, 517.

and this alone is clear evidence of the worldwide use of red pigments, and shows that they have nothing to do with megaliths. It has moreover been seen that it is by no means red-leaved plants only which are used for magical and ceremonial purposes in Melanesia, but that plants of other colours are also used.

The names of the most important sacred plants are given below. The lists include names already quoted in this study as well as some which have not yet been mentioned ¹⁾.

Dracaena

karia (?) (Motalava)
 tsii (Santo, Tismulun)
 ti (Tikopia)
 diri (San Christoval)
 siri (Owa Raha, Owa Riki)
 dili (Saa)
 dili (Ulawa)
 dili or didili (green) (Malaita)
 hango (red) (Malaita)
 njiri (Eddystone)
 diri (Shortland Islands and Buin)
 mitsir (Tabar Group)
 tagete (Duke of York Island)
 manara vaila, togeta kuabari, totogeta (Vuatom)
 pal a kada, mette, mette karau, tikua, tokabangia, rangiene, tagete (Gazelle Peninsula)
 kapirop, pupal (Sulka)
 a nhap (sing.), o nhak (plur.) (Sulka)
 mare (Bola)
 topi, ofe (Roro)
 moia (between Garfuku River and Kraetke Range)
 ogop (Grasslanders)
 samera (or croton), hamera (or croton), sagida (or croton) (Kiwai)
 kurigibi, sereo, boriwamo, busu, kiorema, kaboja, suruga, aubu, ipisa, gjajja, sagia-titi, rawira, gerbara, kukua, kenekene, kokope, ovame, sikiri aribisik, auma, imoa, karakera, goroba, busisi, jasiri, dedegope, ore, didiga-upe, sese (Gogodara)
 buzi (Torres Islands)
 ieri (E Mira)
 vasili ndamundamu, masawe (Fiji) ²⁾

1) No source is mentioned with data which have previously been given.
 2) PARHAM 629 103.

Cordyline

naari (Malekula: Lambumbu)
 naari (Malekula: Lagalag)
 naari-mbrues (Malekula: Seniang)
 naari-mbuas (Malekula: Seniang)
 naari-tamat (Malekula: Seniang)
 naari-memal (Malekula: Seniang)
 naari-numbou timbarap (Malekula: Seniang)
 naari mbal nerew (Malekula: Seniang)
 hari (Malekula: Senbarei)
 tzili (Guadalcanar)
 dendiki (Shortland Islands and Buin) ¹⁾
 taun (Buka Passage)
 takop (Buka Passage)
 tom-tom (Buka Passage)
 ariko (Buka Passage)
 togat (New Ireland)
 tagete (New Ireland)
 garegare (New Ireland)
 more, morle, molomolo (Bariai)
 sem (Bukaua)
 kama (Bukaua)
 kama (Tami)
 kama (Jabim)
 kama (Kai of the Sattelberg)
 wobu (Jabob)
 bogla kaja (Wahgi River)
 ko (Kutubu)
 konjuguri (Kutubu)
 ngasi (Marind anim)
 drlo (Admiralty Islands)
 diro (New Caledonia)
 lolokula, ti, dina, vasili, masawe (Fiji) ²⁾

Cycas

mele (Motalava)
 mele (Venua Lava)
 mele (Mota)
 mele (Aoba)
 mele (Pentecost)
 mele (Santo)
 mwel (Santo: Tasmant District)

1) GUPPY 314 302. 2) PARHAM 629 46, 84 f, 102, ROUGIER 747 1007.

(ni) mwil (Malekula: Lambumbu)
 (ni) mule (Malekula: south of Lambumbu)
 (ni) mweil (Malekula: Seniang)
 (na) mwer (Malekula: Senbarei)
 (na) mwil (Malekula: Port Sandwich)
 mamal (Epi)
 longlong (Tikopia)
 kiki'ie (Buka Passage)
 babaka (Buka Passage) ¹⁾
 lagalaga (Fiji) ²⁾
 roro (Fiji) ³⁾

Casuarina

n'ar (Torres Islands)
 aru (Banks Islands)
 iaru (Malo) ⁴⁾
 nieru (Fate) ⁵⁾
 nil (Tanna)
 toa (Futuna)
 toa (Polynesia) ⁶⁾
 toa (Tikopia)
 saru or tarumare (San Christoval)
 salu (Ulawu)
 salu (Saa)
 salu (Malaita)
 a lala (Nakanai) ⁷⁾
 a iara (Gazelle Peninsula) ⁸⁾
 cal (Bariai) ⁹⁾
 dai (Brierly Island near Tagula) ¹⁰⁾
 baina (Hatzfeldt Haven) ¹¹⁾
 game (Nor Papua) ¹²⁾
 rie (Valman) ¹³⁾
 nari (between Garfuku River and Kraetke Range)
 velau (Fiji) ¹⁴⁾
 jar (Numfor) ¹⁵⁾

Croton

sasa (Motalava)
 pau (Santo, Tasmant District)

1) FRIEDERICI 271 201 2) 2) PARHAM 629 42. 3) PARHAM 629 68. 4) MAC-DONALD 514 250 f, FRIEDERICI 271 203. 5) FRIEDERICI 271 203. 6) RAY 696 149.
 7) FRIEDERICI 271 203 8) FRIEDERICI 271 203. 9) FRIEDERICI 271 203. 10) MAC-GILLIVRAY 519 320. 11) ZÖLLER 989 407. 12) SCHMIDT 826 48. 13) SCHMIDT 831 97. 14) PARHAM 629 107. 15) FRIEDERICI 271 203.

nensah (Malekula, Lambumbu)
 awas, nei tilöh, nelwas (Malekula, Mewun)
 nembang (Malekula: Lagalag)
 naai nggerei, ni mbile, naai-limbr, naai-limbu, nitor ombrung, mbile, batapmbon, mbatambon, mbini (Malekula: Seniang)
 neghegh (Malekula: Senbarei)
 mbumbwa (Epi)
 sasaro tataro (San Christoval)
 agofere (Owa Raha, Owa Riki) ¹⁾
 sising, takuruts (Buka Passage)
 karon, a dami, anga'f (Tanga)
 borogu (Trobriand)
 keakea (Goodenough Island)
 simbiri (Orokaiva)
 taraka (Kerepunu) ²⁾
 taraka (Mekeo)
 vabi (Koita) ³⁾
 romaka (Koiari)
 ironba-ironba (Roro)
 taraka (Maiva)
 sangkalac, bam (Bukaua)
 bam (Jabim)
 bolo (Hatzfeldt Haven) ⁴⁾
 mbolong (Hatzfeldt Haven) ⁵⁾
 ringi (Jabob)
 mosou (Sentani)
 samera (or dracaena), hamera (or dracaena), sagida (or dracaena), esame, mobeas, oso, semerigi (Kiwai) ⁶⁾
 biridama, suruba, saragu-patama, gaugaja, kokaja, sibiri, warugi, dibisara (Gogodara)
 hamera, esame kersimae (Mawatta)
 odo (Kunini)
 kave (Keraki)
 kundama (Marind anim)
 taibi (Torres Islands)
 inents (Lifou)
 danidani (Fiji) ⁷⁾

Evodia

hahe (San Christoval)

1) BERNATZIK 71 57, KÜPER 446 2. 2) STONE 145 249. 3) STONE 845 249.
 4) ZÖLLER 989 407. 5) ZÖLLER 989 407. 6) LANDTMAN 457 69, 185. 7) PARHAM 629 16

mahe (Saa)
 mahe (Ulawa)
 rii, fuaka, konare, kokona (Malaita)
 luk-a-luk (Shortland Islands and Buin) ¹⁾
 owen, pawen (Buka Passage)
 lomo (Vuatomo)
 lomo (Gazelle Peninsula)
 drautolu, nauvula, uthi, sacasaca (Fiji) ²⁾

Coleus

abu'abu (San Christoval)
 haufi (Malaita)
 iag (Buka Passage)
 munte (Buka Passage)
 tata (New Ireland)

Erythrina

rara (Mota)
 newiar (Malekula: Lambumbu)
 nandar, nendar (Malekula: Seniang)
 nerer (Malekula: Senbarei)
 anake (Sikaiana) ³⁾
 wanono (Buka Passage)
 balubalu (Vuatomo)
 guip (Sulka)
 yowia (Brumer Island) ⁴⁾
 drala, rara (Fiji) ⁵⁾

Codiaeum variegatum

mweil mbong (Malekula: Seniang)
 tiatakush (Shortland Islands and Buin) ⁶⁾
 sacasacaloa (Fiji) ⁷⁾

Amaranthus

nwata (San Christoval)

We must again emphasize the frequent lack of botanical precision in connection with information regarding sacred plants. The resemblance between the cordyline and the dracaena particularly ⁸⁾ has led to frequent errors. Moreover, several varieties of the same plant but called by different

1) GUPPY 314 295. 2) PARHAM 629 25, 67, 69, 92. 3) CAPELE 124 143. 4) MAC-GILLIVRAY 519 320. 5) PARHAM 629 22, 66. 6) GUPPY 314 300, 305. 7) PARHAM 629 69. 8) For this see HOGGIN 379 255, WEDGWOOD in DEACON 184 4 Note 2.

names are mentioned in these lists, which renders a comparison even more difficult. No definite conclusions will therefore be drawn from these lists, which naturally cannot claim to be complete although they contain a considerable number of the names indicated by the sources of information.

The linguistic resemblance is most marked in the names for dracaena. The similarity of these names, which are generally variations of the word *tsii*, *diri*, *dili*, etc. and their resemblance to the Polynesian word *ti* for dracaena, has already been remarked upon by some writers¹⁾: "The dracaena", says CHRISTIAN²⁾ "known all over the South Sea Islands as *ti* appears in Ponapean as *ting*. Ngatik thing. It is a common plant in China, the variety with reddish-brown leaves being highly valued for garden ornamentation. They call it *tingsu*." It is highly probable that the words for cordyline, *tzili* (Guadalcanar), *diro* (New Caledonia) and *ti* (Fiji) really mean dracaena. Our sources of information record that in New Ireland the words *togat* and *tagete* are the names for cordyline, but in Duke of York Island, Vuatom and the Gazelle Peninsula, *tagete* or *togeta* is the word for dracaena, and it is quite probable that here too this contradiction is due to lack of botanical precision.

In the New Hebrides as far as Epi, the names for cycas known to me show great resemblance, and are variations of the word *mele*.

The names for casuarina likewise show much similarity in many regions, being variations of the word *aru*, and it is highly significant that even in the inland region of New Guinea between the Garfuku River and the Kraetke Range, the word used for casuarina is *nari*, which comes remarkably close to the word *n'ar*, *aru*, *nieru*, etc. used for casuarina in the New Hebrides. To these names we might also add the list prepared by FRIEDERICI³⁾ containing the words *pokok eru* (Malayan), *haro* or *haru* (Minangk), *arun* (Dajak), and *kaju walau* (Alfuras of Minahassa). In Polynesia, and those regions influenced by the Polynesians, the word *toa* is used. The other lists show nothing of particular interest.

In spite of the incomplete character of the information, it is evident that some of the sacred plants appear under more or less similar names in Melanesia and wider areas of Oceania. It is well known that, besides their grammatical construction, one of the characteristics of the Austronesian languages is their relative uniformity, as opposed to the diversity of the Papuan languages⁴⁾. It follows from this that the majority of the words for sacred plants indicated by us must belong to the Austronesian languages. This is of importance since we have seen the use of sacred plants to be a characteristic feature of the stone using immigrants who are themselves Austronesians.

The remarkable uniformity of the words for coconut and pig in many

1) See DEACON 185 490, FORTUNE 260 114, FOX 263 279. 2) 155 127. 3) 271 203. 4) See RIVERS 725 II 466 f, 474, 478, 484, 491.

regions of Melanesia and Polynesia is well known, the coconut being called by the word *niu* or its derivatives, and the pig by the word *boro*, *poro*, *bor*, etc.¹). It is obvious that these words belong to the Austronesian languages, and this tallies with the fact that, as this study has shown, the introduction of the coconut and the pig is due to the stone-using immigrants. The words for stone, clam, yams, taro, banana, sago, sugar-cane, etc.²), in Melanesia, Polynesia and Indonesia, show certain resemblances also.

1) See FINSCH 236 294 Note 2, 238 II 50 Note 4, FRIEDERICI 271 146 f, 269 59, 68, 108, 131 ff, 172, RAY 701 403, 694 315 f, RIBBE 714 205, ZÖLLER 988 126 f, 150 MACDONALD 513 146, 711 III 485, 496, etc. 2) See IVENS 406 55 f, FRIEDERICI 269 69, 135, ZÖLLER 988 126 f, etc etc.

CONCLUSIONS

Reviewing the results obtained in this study we come to the following conclusions: Melanesia, like many other regions of Oceania, was invaded by the stone-using immigrants, i.e. by light-skinned, wavy or straight-haired, mongoloid people who introduced various types of megalithic stone-work such as dolmens, menhirs, stone circles, stone enclosures, stone tables, stone altars, stone walls, house mounds, etc. The racial characteristics are not only evident from the myths describing these people but are also borne out by the actual distribution of these characteristics coinciding to a great extent with the distribution of their culture. How far wooden objects are due to the influence of these immigrants is difficult to say, since owing to the perishable character of wood our knowledge of these objects is very limited. But the wooden images of the New Hebrides and other regions, and the "Gabelhölzer" of New Ireland, are at least certainly due to their influence. Although it is probable that these immigrants reached Melanesia in several groups, and over a longer period, our present knowledge does not enable us to distinguish between different waves to which the various types of stone-work could be attributed; for at numerous places many different types of stone-work occur side by side, although it is not possible to show that several waves of immigration had taken place. On the other hand, the relative uniformity of this culture is evident from the identical prehistoric finds, the identical use of sacred plants, the same racial characteristics and above all the astonishing identity of the myths of the stone-using immigrants. It has been seen that LAYARD made an attempt to distinguish between an older dolmen culture and a more recent menhir culture; RIVERS thought it possible to separate one wave of the megalithic culture with dolmen-like buildings, from another whose stone structures take the form of pyramids ¹⁾, and SPEISER also is inclined to believe that two waves may be distinguished, the one characterized by dolmens and the other by monoliths ²⁾. That one or the other type prevails locally is immediately evident from the data we have given. But instead of supposing that each type of stone-work is attributable to a special wave of the stone-using immigrants—which cannot yet be proved—I am rather inclined to believe that we are faced with a relatively uniform culture, and it will be remembered that Ambat, for instance, is mythologically connected with dolmens as well as with menhirs ("Penis of the Ambat") and that he possesses a stone mortar such

1) See RIVERS 25 II 549, 726 151. 2) SPEISER 799 176.

as were found in abundance in New Guinea where there is, however, no record of dolmens. The actual difference in the stone-work of the various regions would accordingly be due to the greater preference given to a particular type of stone-work in a certain region, so that local differences developed from a relatively uniform culture comprising originally all, or almost all, the types of stone-work. Or, if the different types of megalithic stone-work were actually due to different drifts of immigrants, the general culture of all these groups must have shown extraordinary similarities.

These light-skinned stone-using immigrants who were a sea-faring people using probably big outrigger canoes, introduced into Melanesia a very highly developed type of agriculture with artificial irrigation or drainage according to the necessities of the country. Besides the stone-work rendered necessary by this system of agriculture, the very complicated works of earth-shifting connected with it are a characteristic feature of these stone-using immigrants. This custom found its further expression in the making of defence ditches, in the artificial levelling of the ground, etc.. One of the most magnificent performances of this kind is the artificial ghost path from Mbau to Nakauvandra in Viti Levu, and in particular the erection of artificial islands which, in the myths, finds its expression in the theme of the fishing up of an island. Contrary to the narrow paths made by the aboriginal Papuans, the stone-using immigrants laid out broad and beautiful avenues, often bordered by stone-work and sacred plants, leading to the dancing grounds which reached their highest degree of development in the park-like dancing grounds of some regions of Melanesia.

The stone-using immigrants introduced a great variety of food plants, in particular the coconut; but the myths also ascribe to them the introduction of taro, yams, bananas, sago, sugar-cane, etc., although it is possible that they are only responsible for the use or cultivation on a greater scale of some of these plants. They also introduced the pig, stone mortars and stone pestles, and in magic and ritual life they brought the custom of using the sacred plants *dracaena*, *croton*, *cordyline*, *cycas*, *evodia*, etc. and considered the *casuarina* also to be of sacred character.

To the early neolithic culture of Melanesia where the art of pottery was still unknown, the stone-using immigrants brought the coiled pottery still found in many prehistoric remains; in many cases, they also used their pottery for sepulchral purposes. The present coiled pottery of Melanesia is but the outcome of the coiled pottery introduced by them, modified in the course of time and influenced by later cultures with which they came into contact. They also introduced quadrangular axes, and used obsidian for making various implements. The art of stone-carving may also be traced to their influence, the prehistoric and the present-day objects of this kind being stone heads, stone figures, stone birds, stone rings, etc. Furthermore, it seems that at least in some regions, they also introduced petroglyphs. They wore hats, and their weapons were, among others, bow and arrow,

though these weapons were also used by the aborigines¹). They interred their dead in the sitting position with the head frequently above the ground, and in many cases removed the skull after the decomposition of the body. They had a very highly developed cult of the dead. This is apparent not only from the better treatment of their dead, the erection of stone-graves and tumuli, the preservation of the bones in dolmens, etc., but particularly also from the fact that they erected menhirs which they considered as representing the ancestors, and that the sacred plants were also closely connected with the dead. These sacred plants were said to be the abode of the ghosts; for instance in Arosi, the coconut palms were sacred trees "full of adaro", and croton was even called "tataro". In some places dancers representing the dead were adorned with these sacred plants; these plants were grown about graves; the spirits of the dead liked to sit on their branches, and therefore they were used for the widely known ceremony of the "fishing for the soul", etc.

It was also the stone-using immigrants who introduced the modelling of skulls, including probably also the modelling of enemies' skulls. It is highly probable that they were not cannibals, though it is likely that they were head-hunters. Although serpent worship has not been dealt with generally in this work, it has been proved that the figona serpent worship of the Solomon Islands belongs to the stone-using immigrants, and many of their culture heroes had the form of, or were partly snakes. The ceremonial bonito fishing and the cult of sharks, two elements which were most particularly developed in the Solomon Islands, also form part of the culture of the stone-using immigrants.

The stone-using immigrants have an extremely rich mythology with innumerable typical themes which are to be found again and again over wide areas of Melanesia, with striking similarity. These myths are full of indications relating to the history, and there is no other culture in Melanesia whose representatives have such a highly developed awareness of historical events as the stone-using immigrants. This particular trait finds its expression in the commemoration of their ancestors in stone-work, and it was precisely by this stone-work that the memory of the ancestors was kept alive for many generations. These facts are borne out by the Polynesians whose sense of history is unequalled in the whole of the South Seas, and it is to Polynesia that the stone-using immigrants went after having passed through Melanesia.

The widespread migrations of the stone-using immigrants, were, in some cases at least, due to the pressure of the later coming Melanesians. It is, however, highly probable that the stone-using immigrants were characterized also by a natural migratory tendency of great force. These migrations, and

1) RIVERS also has attributed the use of bow and arrow to his kava-people, and he points out too that his dual-people were already in possession of these weapons. The different types of bows need not be discussed here.

the ever recurring departure from the places in which they had temporarily settled down, have found their mythological expression in the final departure of the numerous culture heroes of the stone-using immigrants. Since they had brought a higher type of culture to a more primitive people it can be easily understood that their departure was deeply deplored. This concern is expressed in the myths in the very frequent statement that the departing culture heroes took all the good things with them, and that living conditions deteriorated after their departure. Only a culture animated by a very strong migratory tendency was able, as we have seen, to found such very extensive trading expeditions as the *kula*, the *hiri*, etc.

Owing to their superior type of culture the stone-using immigrants became the chiefs or the members of the highest ranks among the peoples in the midst of which they settled. In some cases at least they enslaved the inferior populations, employing them in the execution of their works. This is borne out by the Tongan myth relating that when the gods under the leadership of Maui's son came to Tonga they had no slaves. Now, a sandpiper went forth to seek its food, and scratching the ground, it unearthed a heap of worms; when the sun had shone on them for many days, they grew into men, and the gods of Tonga took them for their slaves¹).

Having summed up the culture of the light-skinned stone-using immigrants, we must now give a survey of the routes followed by them on their migrations. After leaving the mainland of South-East Asia, one wave passed through the southern islands of Indonesia. This drift, with which we need not deal here, reached as far as the Moluccas, and its latest influences extended to the western part of New Guinea as far as the Mamberamo River on the north coast. In the south, its influence made itself felt in the islands of Kei and Aru and the mainland opposite. These influences did not extend further east and this culture drift is therefore not of great importance as far as Melanesia is concerned. That stream of the stone-using immigrants which did influence Melanesia, and whose representatives, after having passed through Melanesia finally came to Polynesia, started from an area between Formosa, the Philippines and North Celebes from where they went to Micronesia; in this latter archipelago, Yap must have been one of their halting places. Continuing their migration in a south-easterly trend, they came to the Admiralty Islands. From there, one wave went in an easterly direction over Pak, Tong, Towi, Nouna to the mythical Jap. Although the exact position of this latter island is not known, it is, however, most probable that it is situated further east or south-east; it is therefore possible that at least some elements of these stone-using immigrants reached New Hanover and New Ireland, although this does not seem to be the only route by which they came to these islands. It is not

1) FISON 251 161.

impossible that from the Admiralty Islands elements of the stone-using immigrants came to the St. Matthias Archipelago, although others came from the north, probably from Micronesia, in a migration analogous to that which came to the Admiralty Islands from Micronesia.

Another wave of the stone-using immigrants went from the Admiralty Islands to the mainland of New Guinea. Since those migrations of the stone-using immigrants which reached the Schouten Islands, started, according to the myths, from the Monumbo region, we must infer that the stone-using immigrants, after having left the Admiralty Islands, touched the mainland for the first time probably in the Monumbo region; but, apart from this indirect indication, we have no direct mythological proof of this. From Monumbo, the stone-using immigrants went first to Manam and from there over the other Schouten Islands as far as Wogeo. (The wanderings of the hero Monumbo who migrated over the Schouten Islands to the west, correspond to the statement that the stone-using immigrants of Wogeo (nanarangs) created also the islands Manam and Koil, probably indicating that the migrations of the nanarangs proceeded through these islands.) To what extent the migrations went from Monumbo to the east will be seen later on. From Wogeo, the stone-using immigrants went over to the mainland, west of the estuary of the Sepik. In many migrations along the coast, these people went to the east beyond the estuary of the Sepik, and they also migrated to the west (Wunekau brothers, Tenal-Pisin, Buguti-Bugatai). In their migrations to the west they went along the coast via Oinake, Tami River, Sae, Mabo, Jambuee, then to Humboldt Bay and from there to Nafri and Lake Sentani (Yabero, Taimi). The stone-using immigrants did not migrate further west than this and, as has already been said, the traces of their culture west of the Mamberamo, on Kei, Aru and on the mainland opposite these islands are due to influence coming from Indonesia. From the north coast west of the Sepik estuary, the stone-using immigrants penetrated deeply into the interior of the country, a migration which led to the crossing of the whole of New Guinea as far as the south coast. This migration started from the Arapesh District, passed through the Abelam region and then reached the Middle Sepik. From there the immigrants probably went along the Yuat River, and penetrating deeper and deeper into the interior of New Guinea came to the Mt. Hagen District, Nabilya River, Kagole River, and the area of the "Grasslanders" as far as Lake Kutubu. After leaving the Tugi, they went along the Sambrigi River and, crossing the Mt. Murray region, they passed through the area east of the Upper Kikori, and down to the south-east. Whether one group branched off in a south-westerly direction reaching the east bank of the Fly from where they finally came to the Gogodara and Kiwai, is uncertain.

In the interior of New Guinea, the stone-using immigrants spread eastwards along the Wahgi Valley, the tributaries of the Wahgi, and as far east as the headwaters of the Purari. From there they descended south, passing

through the areas east and west of the Purari and almost reaching the coast. From the Lower Purari they branched off to the east, keeping at some distance from the coast at first, but also reaching the coast at some places. On these migrations some elements of the stone-using immigrants came from Iari to Uaripi, Motumotu and even Delena (Mairau's people). The pressure exerted by the more eastern waves of these stone-using immigrants coming from the interior, brought about the migrations of the Ipi tribes. Since these migrations are of very recent date, and some of them have not yet come to a halt, and since these drifts clashed with the Europeans penetrating into the country, the influences left by the stone-using immigrants on the material or non-material culture of this region are very minor. It is probable that another group branched off from the stone-using immigrants of the Middle Sepik, and crossing the headwaters of the Fly and the Tedi River, reached the eastern bank of the Middle and Lower Fly. From here, elements of the stone-using immigrants came to the Kiwai and the Gogodara (Ibari), and continuing their big north-to-south migration, several groups reached the Trans-Fly area (Bidedu, Baduame, the ancestor of the Yende and Iwa). From Kiwai, the stone-using immigrants made many voyages along the coasts (Sido) which led as far as the Purari estuary to the east or perhaps beyond it (Kivovia), and which, towards west, extended as far as the Morehead River (the wanderings of Kambel of the Keraki extended likewise as far as the Morehead River); on these voyages many of the Torres Islands also were touched. In the Torres Islands, these wanderings proceeded from west to east (Sido, Yawar, Gelam) and some of them went back again to Kiwai (Sido). Following a general migratory tendency from east to west in the Trans-Fly region, evident from Kambel's migration to the west and the migrations of the Semariji, Setavi and other neighbours of the Keraki, the stone-using immigrants migrated from the Fly estuary to the west along the coast. This migration went via the Jawin River, Kurkari, Siwasiv, Kajakai, the Maro River and the Kumbe River. Some of these elements penetrated into the interior of the country by ascending the rivers as for instance the Maro River (Yavar) and the Kumbe River (snake Bir). In this way some elements of the stone-using immigrants came even as far as the Yee anim deep in the interior of the country. Other groups continued their migration to the west along the coast, and thus the last spurs of the stone-using immigrants reached even as far as Frederik-Hendrik Island. We have thus come to the most western point reached by the stone-using immigrants on their migrations to the west. The wide adjacent coastal area to the north-west shows no traces of them, and CHURCHILL's theory that the Polynesians on their migration from Indonesia passed through the Torres Islands before coming to Fiji, therefore collapses, and has been rejected for other reasons as well.

Let us now return to the Monumbo area on the north coast of New Guinea where we have only dealt with those migrations of the stone-using

immigrants which proceeded to the west. Another group of stone-using immigrants starting from Monumbo must have migrated to the east along the coast (Liwowo). We can follow this migration as far as Hatzfeldt Haven, it must, however, have proceeded subsequently to Dampier Island for, according to the Bilibili version, the migrations of Mandumba or Manumbu started from Dampier Island; from there the immigrants went to Rich Island, then they migrated along the whole of Astrolabe Bay and along the Maclay Coast until finally they came to Rook Island. Some groups of the immigrants must also have come to Long Island since, according to the Dampier Island myth, the humans created by Manumbu peopled Rich Island, Long Island, and the other islands of the archipelago; moreover, Rich Island and Long Island are stated in the myth to have been created by Manumbu, which is a further indication that the migrations proceeded in this direction too. The route along which the migrations followed from Rook Island to the Bismarck Archipelago will be discussed later on; we shall first follow the migrations along the coast of New Guinea.

The presence of the stone-using immigrants was found to be manifest on the whole north coast of the Huon Gulf as far as Cape King William and deep in the interior. It is natural to conclude that it was by the continuation of the Manumbu migration to the south-east that the stone-using immigrants came to this region, although we know of no tradition about this. We do not know therefore whether the stone-using immigrants, after passing along the Maclay Coast, continued their migration along the coast, finally settling down on the coast of the Huon Gulf and penetrating into the interior, or whether it was from Rook Island that they came to the mainland. But this is perhaps a minor detail. On the long coast from the mouth of the Markham as far as about Morobe, hardly any traces of the stone-using immigrants are to be found, except for a few things whose presence can be accounted for by contact with the Huon Gulf. It is therefore most natural to conclude that the stone-using immigrants on their further migrations did not go along this coast, but continued their way by sea in a southeasterly direction. One wave of these immigrants came via Tuma Island to Trobriand Island; their further migrations from this latter island will be discussed later. Another stream branched off to the mainland resulting in the settlement on different points of the coast between the Waria River and Collingwood Bay. On this wide front, from the Waria to Collingwood Bay, the stone-using immigrants penetrated into the interior of the country in an east-westerly infiltration, leading thus to their third big crossing of New Guinea. It can most probably be assumed that after reaching the south coast, extensive migrations were undertaken which reached even as far as the Papuan Gulf (Keaura); and on these migrations to the west the stone-using immigrants came into contact with similar people who, from the Lower Purari, migrated along the coast in an eastward direction (Mairau's people). Although we know only that Aroma was their starting point, it is

nevertheless very probable that the stone-using immigrants who from there migrated eastwards along the coast to Mailu and beyond it (Samudulele) are a branch of those stone-using immigrants who had crossed the whole of New Guinea. In the Mailu District, they encountered another group of stone-using immigrants coming from the Massim District, these latter being themselves the last spur of those megalithic immigrants who had come to the Massim District via Tuma and Trobriand, after having separated from that group which had crossed New Guinea between the Waria and Collingwood Bay. In the Massim District the migrations of the stone-using immigrants apparently took place in the following way: after having come from the north-west to the Trobriand Islands via Tuma Island, one group of the stone-using immigrants migrated to the east via Kitava, Iwa, Digu-menu, Kwayawata, and other islands of the Marshall Bennet Group, until they finally came to Nada Island in the east (Tudava). We do not know in what other direction this migration subsequently proceeded. It is, however, certain that the Solomon Islands were not reached by this migration, since there is no tradition pointing to this direction in the Solomon Islands either. Another group of these stone-using people migrating to the east, after reaching Murua, branched off to the south, went to Misima and from there migrated to the D'Entrecasteaux Islands in a north-westerly direction (Gereu). Another group came directly from the Trobriand Islands over the Amphlet Islands to the D'Entrecasteaux Group (Inuvaylu'a) from where reflex movements to the Trobriands seem to have taken place (Inuvaylu'a). Other migrations of the stone-using immigrants starting from the D'Entrecasteaux Islands went over the Amphlets and Trobriand Islands as far as Murua (snake Motalai). From the D'Entrecasteaux Islands the stone-using immigrants must have gone over to the mainland opposite, where they took possession of several regions. Thus one group went from Good-enough Island to the Ari, and another group must have landed somewhat further south (Lavarata), after which it migrated to the north-west along the coast. We have connected the stone-using immigrants of Collingwood Bay with that group which, after branching off from the common drift, crossed New Guinea on a wide front. It is, however, equally possible that this latter group of stone-using immigrants came to the mainland of New Guinea from the Massim District, but we have no mythological proof on which to base a decision in this question. Since, nevertheless, all these groups belong to one and the same culture, this detail is of minor importance and will no doubt be cleared up by future investigation. From the Massim District, the stone-using immigrants went also to the islands Samarai, Sariba, Rogeia, and finally to Suau in which latter region they encountered those stone-using immigrants who, from the west, had come to Mailu.

It is probable that from the D'Entrecasteaux Islands the stone-using immigrants migrated to the south-east as far as Sudest. This, it is true is

not expressly stated in the myths, but it has been seen that the stone-using immigrant Tamudulele, the originator of the Sudest people, was likewise known on Sabari, Panniet and farther west as far as the D'Entrecasteaux Islands and Milne Bay, making it at least probable that these places, or some of them, were halting places on the Tamudulele migration. From Sudest, the stone-using immigrants migrated finally to Rossel Island (snake gods).

We shall now resume our discussion of the migrations of the stone-using immigrants from Rook Island. It is probable that besides those stone-using immigrants who came to Rook Island from the west, another group of stone-using immigrants reached Rook Island from Tami Island (Panku). Except for a migration in the reverse direction, viz. from Rook to Long Island (Panku) (this is additional proof that Long Island also was one of the stations on the migration of the stone-using people from Dampier Island to the south-east) the stone-using immigrants went from Rook Island to the Willaumez Peninsula (Panku). Some groups of these migrants branched off to the Vitu Islands and perhaps also to the Kombe. Thereupon the stone-using immigrants must have journeyed to the north-east by sea without, or almost without touching the north coast of New Britain, until they reached the north-western Baining District and the Gazelle Peninsula, where they must have settled down for a certain length of time. From here they sailed to the west coast of New Ireland, landing in the Mesi District (Moroa, Sigeragun). Then they crossed the island which in that part is very narrow, reaching the east coast at Kanam in the vicinity of Lokon. From Kanam they migrated in a north-westerly direction, passing through Lemeris, Kandan Bay, Panagundu, and Tabar Island, after which they continued their migration to the north. We do not know the final point of this migration to the north. It is possible, but by no means certain, that another group of the stone-using immigrants landing on the west coast crossed the northern part of the island near Lovolai, after which they migrated along the coast in a south-easterly direction (Lulura). On the migrations of the stone-using immigrants along the east coast of New Ireland not only was Tabar reached, but Lir and the Tanga Islands were also touched. This is evident from the material remains of the stone-using immigrants on these islands, although we have found no traditions regarding these migrations. On the west coast the stone-using immigrants seem to have extended their influence to the southern part of the island also, for the stone-work of Kandass, Pugusch and Lambom points to the western coast of Middle New Ireland. We know of no traditions, however, regarding these relations. On the other hand, the southern end of New Ireland viz. Lambom, Likiliki and Laur, is likely to have been influenced also by stone-using immigrants who came from Tanga and perhaps from some of the other islands off the east coast of New Ireland too. The presence of the stone-using immigrants is evident in the Sulka region, and it has been seen that strong influences from

the Solomon Islands were at work here. It is therefore quite possible that the influences of the stone-using immigrants came to the Sulka from the Solomon Islands, as well as from South New Ireland, but since the myths do not contain indications regarding any starting point, this question cannot yet be answered.

From New Ireland, the stone-using immigrants migrated over Nissan to Buka (this is confirmed by the traditions both of New Ireland and Buka: for the human beings created by Moroa, according to the New Ireland myth migrated to Buka; and, according to the Buka myths, Uskawu or Manatchire came from a long distance via Nissan Island; Porona came to Buka from Nissan, and also the two light-skinned women who came "from some place a long way off" landed first on Pororan Island, i.e. at a place where a migration coming from the north-west would be likely to arrive first). From Buka, the stone-using immigrants must have migrated further to the south-east. If the knowledge which we have of the megalithic culture in Bougainville corresponds to its actual distribution in this island, one would be obliged to conclude that the migration of the stone-using immigrants went along the east-coast of Bougainville; for whereas there is no record, as far as I know, of any traces of the stone-using immigrants on the west coast of the island, the megalithic stones of the north coast were all found in the middle or eastern part of the north coast (in Kurtatchi, between Gomen and Ruri, the coastal district of the Raua Plantation and on Tiop Island); an irrigation system is recorded near Cape Laverdie, and traces of the stone-using immigrants were furthermore found with the Nasioi. It might again be emphasized that we have no mythological records regarding this migration, and such a migration can only be inferred from the local distribution of the traces of the stone-using immigrants as far as they are known to-day. In any case the stone-using immigrants, after having migrated in a south-easterly direction, must have arrived first in the Shortland Islands, since here again they are mentioned in the myths, and since it was from the Shortland Islands that they started on their further migrations. After a migration from Alu to Fauro and back to Alu, the stone-using immigrants went over to Buin. Here they migrated in a westerly direction via Roai, Papara and then they penetrated into the interior of the island (Bego) as did so many other stone-using immigrants. Another group of these stone-using immigrants went from Fauro Island over Ovou Island to Tonolei Bay, south-east Bougainville; then crossing the Alania River they went to the Biralini River (Bunosi). Other groups of stone-using immigrants went from Alu to Mono Island and Choiseul (the children of the couple created by Bego). From Choiseul the stone-using immigrants went over Vella Lavella and Renonga to Eddystone (Kolondavi; Vanavana who causes taro to grow in Vella Lavella and Renonga and bananas in Eddystone; and some of the Eddystone bonito shrines are of Vella Lavella origin). To this group of megalithic people

must also belong those stone-using immigrants whose traces can be recognized on Kulambangra Island and in New Georgia. This is not only evident from the similarity of the stone-work, the use of sacred plants, the prehistoric objects, etc., but also from the fact that the volcano Bangana in Buin is the common afterworld for the Shortland Islands, Choiseul, Vella Lavella, Renonga, Eddystone, and Roviana¹). That this home of the dead in Buin does not belong to the culture of the Melanesian Mono-Alu, is probable from the fact that Buin was not a starting point of the Mono-Alu migration but was, on the contrary its final aim or one of its final aims, for the Mono-Alu migration proceeded in the opposite direction, i.e. from New Georgia to Vella Lavella, Choiseul, Fauro, Alu, Mono, and only then to Bougainville. Moreover, in all those regions in which the conception of the home of the dead in Buin is current, clear traces of the stone-using immigrants were found. These facts make it probable that the belief in the afterworld in Buin belongs to the culture of the stone-using immigrants. It has furthermore been seen that by the present trading relations all these islands are in contact reciprocally, a fact which is possibly due not only to the influence of the Mono-Alu people in this region, but is also perhaps an indication of a more ancient culture contact. For all these reasons it can be concluded that the stone-using immigrants who came to Kulambangra and New Georgia belonged to that group of megalithic people which also influenced the other neighbouring islands, although we have no traditions giving us details regarding their migration. There is also a lack of traditions regarding the route along which the stone-using immigrants came to Isabel. Our knowledge regarding the local distribution of the megalithic culture on this island is all too inadequate. We do know, however, that the southern end of Isabel, Bugotu, has certainly been touched by the stone-using immigrants. If this were to be the only region of Isabel which had been strongly influenced by the stone-using immigrants, it would favour the opinion that they did not come to this island directly from Choiseul. This is confirmed by the fact that, from Choiseul, the migrations of the stone-using immigrants, so far as they are known to us, went in a southerly direction as far as Eddystone, but that nothing is known of movements to the east. It is therefore probable that the stone-using immigrants came to Isabel from New Georgia. From South Isabel (Bugotu) the stone-using immigrants went in several groups to north Malaita. One group of them went apparently via Ramos Island to north Malaita, landing at Ataa Cove on the northern part of the east coast, after which they penetrated into the interior of the island (Sina Kwao's relatives, see also the ghost path from North Mala to Ramos Island and Bugotu); a few of these

1) See WHEELER 935 91 ff, 99, RINDE 714 148, HOCART 362 80, 93-95, GUPPY 314 53, THURNWALD 878 I 320 f, 881 131, 883 531, etc. There are also a few other homes of the dead, but these conceptions are less frequent and of no interest to us.

immigrants landed also at other places of north Malaita (Bora i Gao; the introduction of the banana from Momolu); another group likewise coming from South Isabel came to Malaita via Florida Island; this group landed near Fiu and Auke on the west coast of Malaita (Red Head and the builders of the artificial islands); these immigrants too, after their arrival on the coast, went into the interior of the island. On the west coast, there were also some other migrations of the stone-using immigrants. The megalithic immigrants also reached Little Mala, the southern end of Malaita. But nothing can be said regarding the route followed on this migration, since in the Saa myth the immigrants are said to have come from the sky (the light-skinned immigrants, the first of whom was "Lord spark of fire"). In any case they must have penetrated into the interior of Little Mala, for it is said that from the sky they descended to the main ridge, and from there we can follow their migration to the coast. From Little Mala they migrated to Ulawa (the chief with the mortar; and it was a man from Mala who fished up Ulawa). Another group of the stone-using immigrants wandered from south Malaita via Marau (Guadalcanar) and Florida to Langalanga on the west coast of Malaita (figona Walutahanga; cf. also "Kela" and "Nggela"). All the phases of this migration can be confirmed by other records: The people of Marau Sound are immigrants coming from the Areare District in south Malaita; the migration from Guadalcanar to Florida is confirmed by the fact that Koevasi of Florida also stayed in Guadalcanar, and by the further fact that the ghosts of Florida go to Guadalcanar; and the last part of the great migration from south Malaita to Langalanga, viz. the migration from Florida to Langalanga is borne out by the myth according to which the first human being from whom the Langalanga people believe they descend swam to Florida from where, however, he was brought back by his mother to Langalanga. The connection between Guadalcanar and Malaita is furthermore evident from the myth according to which the figona Kihuimasanga of Guadalcanar came to that island after having picked up a taro and a stone in Malaita. This shows that the stone-using immigrants must have come to Florida from two directions at least, one group from Bugotu (Red Head) and the other from Guadalcanar (Walutahanga).

We do not know whether the stone-using immigrants coming from over the sea, landed also at other places on Guadalcanar other than the eastern part of the island (Marau). It is therefore not possible to say whether any stone-using immigrants coming from New Georgia landed in the western or southern part of the island.

The stone-using immigrants who came from South Malaita, and subsequently settled down in Marau, went from Marau over the Three Sisters Islands and Ugi to San Christoval (see the way of the Aراها ghosts over these islands in an opposite direction to Marau; according to the Guadalcanar myth, one of the chiefs who left Marau went to San Christoval).

Another group of stone-using immigrants came from Malaita perhaps directly to San Christoval; at all events no intermediate stations are recorded regarding this migration. These immigrants landed at Robwana near Waimara, and descended to the stream Wai abu (Mwara). The Hatuibwari migration proceeded from San Christoval via Ugi, Ulawa, south-east Malaita to Marau and then back to the south coast of San Christoval; Hau huari'i also went from Arosi to Malaita, and the fact that he fished up Malaita and Guadalcanar may likewise be taken as an indication that he touched these islands on his voyage; and Uraurasiahoa, the "Passing Stranger" of San Christoval also fished up Malaita.

Whether from the places touched by these migrations conclusions can be drawn regarding the migrations of the Araha and Mwara we do not know. It has, however, been seen that at all these places mentioned clear traces of the stone-using immigrants were found. It is therefore more likely that we are faced here with secondary movements and reflex migrations of the stone-using immigrants.

One group of the stone-using immigrants migrated from the eastern part of Guadalcanar (Mole District) to Renell Island in the south (one of the two chiefs, the other of whom migrated to San Christoval). It is, however, probable that Renell Island was most particularly influenced by such stone-using immigrants who had wandered back from Polynesia and Santa Cruz.

From the fact that the megalithic culture of Owa Raha and Owa Riki is almost identical with that of San Christoval, and that the stone-using immigrants appear here under the same name as on San Christoval (Atawa and mako-mako-ai-matawa) it can be concluded that from San Christoval the stone-using immigrants went over to the neighbouring islands Owa Raha and Owa Riki. From the Solomon Islands the stone-using immigrants must have migrated to the Santa Cruz Archipelago and to Tikopia, although both these areas, but particularly Tikopia, have been influenced also by groups of people migrating back from Polynesia. Definite indications regarding the course of these migrations are not given in the myths.

Although we have considerable knowledge of the megalithic culture in the Banks Islands and the New Hebrides, we have only very little information regarding the migrations of the stone-using immigrants within this area, nor do the myths say anything definite regarding the routes along which the stone-using immigrants came to the New Hebrides. It has already been seen that in SPEISER's opinion a direct migration had taken place from the north coast of New Guinea to Malekula, and other students have considered Malekula as the centre from where the megalithic culture spread to the other islands. Neither of these two opinions can be accepted; for although the resemblance is particularly strong between the megalithic culture of the New Hebrides and New Guinea, similar elements of culture were also found at many other places in the interjacent area. We have

accordingly no reason to separate the megalithic culture of New Guinea or of the New Hebrides from the megalithic culture of the rest of Melanesia. The culture contact existing between the Banks Islands and Santa Cruz has already been pointed out, but we have no direct mythological proof to show that elements of the stone-using immigrants came to the Banks Islands from Santa Cruz or from the Solomons or from both these areas. The second assumption that culturally Malekula occupies a central position is contradicted by the few records which we have regarding the history of the culture. With regard to the migrations of the stone-using immigrants within the area of the Banks Islands and New Hebrides we know that Qat was said to have been born in Venua Lava, and, according to one version, in order to fetch night he went to the Torres Islands; that some Tamate societies of Mota were said to have been introduced from the neighbouring Venua Lava; that from Venua Lava, Qat and his brothers went via Gaua and Mera Lava to Maevo, from where they returned to Venua Lava. It is probable that some elements of the stone-using immigrants came to Maevo by this route, although there is another route by which they reached this island. Qat took his departure from Gaua, but we are not told where or in which direction he went. In HARRISON's view the Suqe spread from Malo northwards up the west coast of Santo, and regarding the culture movements in the New Hebrides more generally, he says¹⁾: "Whereas movements have generally been considered to pass from the north southwards, there is no doubt that the two most obvious diffusions which I have been able to trace spread westward from Omba, which was almost certainly affected from the east, and northward from Efate through Emae, Tongoa, Hambi to South Malekula; important culture traits in Santo have largely been derived from Malo to the south. After studying the literature and the people themselves, I have come to the conclusion that the culture of South Melanesia is even more complex than had previously been supposed". SPEISER, it will be remembered, instancing the resemblances between the Banks Islands and Cape Cumberland, is of the opinion that a migration took place in just the opposite direction viz. from the Banks Islands along the west coast of Santo to the south as far as Aore and Malo, and we have already said that we are inclined to accept this opinion. Although we are not told in what direction Qat went after his departure from Gaua, this island is very likely to have been the starting point of a migration of the stone-using immigrants which, from Cape Cumberland, proceeded along the west coast of Santo, and it is therefore quite possible that the light-skinned stone-using Qat-people, after their departure from Gaua, went over to Santo. From Malo the stone-using immigrants must have migrated to Aoba, for in Aoba the Suqe and the first pigs were said to have come from Malo. In Aoba it was said of Tagaro that he fetched night from Maevo and it is probable that this

1) 344 335.

is the second route along which elements of the stone-using immigrants came to Maevo. Tagaro of Maevo who, it was expressly stated, was not born in Maevo (which seems to confirm the fact that he came over from Aoba), finally departed to the east, which obviously signifies the subsequent migration of the stone-using immigrants to Polynesia. On the basis of these data it is most probable to conclude that the migration of the stone-using immigrants in this area started in Venua Lava from where, after having spread to the Torres Islands, it proceeded to Gaua, Cape Cumberland, along the west coast of Santo in a southern direction, to Aore, Malo, Aoba, and Maevo and from there finally to Polynesia.

There are no direct indications in the myths regarding the migrations by which the stone-using immigrants came to the New Hebrides further in the south. It has already been mentioned that, according to DEACON, a wave characterized by the use of monoliths came from Lambumbu to South-West Bay on the southern part of the west coast of Malekula, and LAYARD has traced this wave back to the Small Islands. The coconut was in fact said to have been introduced to Lambumbu from Lagalag. In view of the distribution of the stone-using immigrants in Malekula, it is possible that the megalithic culture as a whole went from the Small Islands to the Big Nambas region, and that by crossing the neck of Malekula via Lagalag it came to Lambumbu and the other parts of the west coast. But there is nothing to prove that this was a particular wave of the megalithic culture characterized by the use of monoliths only.

The following other movements can be observed: on Ambrym the Mangge was said to have been introduced from Malekula and the rank names resemble particularly those of East Malekula. Also the Luan had been introduced to Ambrym from East Malekula. To Epi the Megi was likewise brought from Malekula, and the rank names of the Suge of Fate also resemble those of Malekula, so that in this area Malekula was probably the centre from which the culture of the stone-using immigrants spread to the other islands. No further information of a historical nature is forthcoming so far as I can see. In the Southern New Hebrides a few further traces of the stone-using immigrants of the north have been found, but the predominating influences are those from New Caledonia and most particularly from Polynesia.

The stone-using immigrants who invaded New Caledonia were seen to have arrived first on the northern end of this long island, so that it is probable that they came to New Caledonia from the north-west. SPEISER's opinion of a direct migration from the Sepik to New Caledonia is once more contradicted by the fact that many elements of the megalithic culture of New Caledonia are likewise to be found at other places of Melanesia. But the few myths of interest to us do not contain any direct information as to the route followed on this migration.

Finally, it has been seen that the stone-using immigrants came to Viti

Levu from the Solomons in the north-west, where Bugotu and San Christoval were halting places on their migration. They landed at different points of Viti Levu, and on widely ramified migrations, which we have discussed in detail, they came to the many other islands of the archipelago such as for instance Kandavu, Mbau, Ovalau, Vanua Levu, etc.; farther east they came to the Lau Islands and then went finally to Polynesia. This ends our discussion on the migrations of the stone-using immigrants in Melanesia.

The problem of the relative and also absolute chronology of these migrations must now be examined. That the stone-using immigrants came later than the aboriginal Papuans need not be discussed. CHINNERY is certainly right in considering the stone-using immigrants as very early comers who arrived in New Guinea when it was inhabited by woolly-haired people, simple and rude in their culture, not knowing agriculture but, as he thinks using the sago swamps only¹). Similar views have been expressed by other writers, but these views were based upon other data, and the names given to the various ethnic groups differ too²). According to STRONG³) it was the "original Melanesians" or "primitive Melanesians" who followed the Papuans and who correspond to our stone-using immigrants. HADDON thinks it was the "Proto-Polynesians" who followed upon the Papuans with whom they intermingled thus being the originators of the Melanesians⁴). According to SCHMIDT⁵) the Melanesians are anthropologically a mixture of Papuans and Austronesians; this, however, does not apply to the Melanesian language. According to RIVERS' scheme, the megalithic people represent a later stratum of the kava-people, which implies that the megalithic people are older than the Melanesians; for the betel-people which RIVERS generally identifies with the Melanesians are, in his opinion, more recent than the kava-people. It has, however, already been shown that it is necessary to re-examine this scheme. This study has shown that the light-skinned Austronesian stone-using immigrants came later to Melanesia than the aboriginal Papuans but earlier than the dark-skinned Melanesians. The following are the reasons which have led us to conclude that the stone-using immigrants preceded the Melanesians: The dark-skinned Melanesian Manus came to the Admiralty Islands after the Mantankor whom we were able to identify as the stone-using immigrants. On Wogeo Island, the stone-using immigrants (nanarangs) were said to have been the first inhabitants, who disappeared when a more recent people took possession of the island. It is not specified who these later people were, but they could be no other than Melanesians. The dark-skinned Melanesian Mono-Alu came later to the Shortland Islands and Buin, than the stone-using immigrants. In the Owa Raha game, the dark-skinned Melanesians are shown as coming later than the light-skinned stone-using immigrants; the dark-skinned Melanesians,

1) CHINNERY 151 285 f.

2) See HAGEN 333 147.

3) In 712 (1920/21) 29-32.

4) See MURRAY 596 25 f.

5) 834 151 ff. See also RAY 705 52 f.

according to the Erromonga story, arrived later in the island than the Nombo, the light-skinned introducers of agriculture; and for Fiji also we have shown that the dark-skinned Melanesian Nanga people came later than the light-skinned Ndengei stone-using immigrants. The greater age of the stone-using immigrants is moreover evident from the fact that in many cases they inhabit the interior of the country whereas the dark-skinned Melanesians live on the coasts. It might be recalled that on the coast of Humboldt Bay for instance, where the people are Melanesian in race and language, no traces of the stone-using immigrants were found, whereas on Lake Sentani farther inland, where a Papuan language is spoken, such traces were clearly manifest; on the Markham River where Melanesian influences reached far up the river, no traces of the stone-using immigrants were found, whereas there were traces in the inland region of the Kukukuku etc. Mythological themes characteristic of the stone-using immigrants are much more clearly evident with the Monumbo Papuans for instance, than with their Melanesian neighbours of Manam Island. Although stone-work is at least probable on Manam, the typical myths must have been effaced here by the later coming Melanesians. These few indications may suffice, and we can now turn to the question of the absolute chronology of the stone-using immigrants. In this discussion we shall take into consideration the Melanesian evidence only, without considering the data regarding the Asiatic mainland and Indonesia.

It has already been seen in the course of this study how extremely scarce is the Melanesian evidence with regard to this point, and no definite result can therefore be expected. For calculating dates in Melanesia as well in Polynesia almost our only guides are the native genealogies counted by generations. THOMSON ¹⁾ has already clearly pointed out that they contain two sources of possible error saying: "It was very rare for a man of consequence to carry the same name throughout his career. Adoption, any notable exploit, or succession to a title were constant excuses for such changes, and it is quite possible that in the older genealogies the same hero is recorded twice under different names. Moreover,... seeing that the succession of them went to the next brother when the son was not of an age to wield the power, it is highly doubtful whether every name represented a generation... On the other hand, there is the tendency to omit the names of remote personages whose short reign or insignificant character have failed to stamp themselves on the memory of posterity. There is thus a double tendency to error—on the one side the multiplication of generations, and on the other the curtailment by omissions". Moreover, opinions may differ regarding the duration of a generation. FORNANDER and BREWSTER have worked on the basis of thirty years, which, according to CAPELL and LESTER seems too long, and THOMSON, who also thought it

1) 866 18 f.

to be too long, found that the generations of Tonga and Fiji in modern times average from 25 to 27 years¹). I shall calculate on the basis of 25 years. SPEISER has pointed out²) that the representatives of his "korwar style" were wavy-haired people who possessed a highly developed cult of skulls. They must have worn pointed round hats since, as he argues, the carved images have such hats. Since, as we have seen, the wearing of hats must be considered as a characteristic feature of the stone-using immigrants, SPEISER has attributed the korwar style to the megalithic culture³). He considers the korwar style as a derivation from the Khmer art, and he concludes that the korwar style can accordingly only have come to Melanesia after the Khmer art had reached its apogee. Since this would have been in the eighth century A.D., SPEISER infers that the megalithic people after having left South-east Asia immigrated to the South Seas in the eighth century.

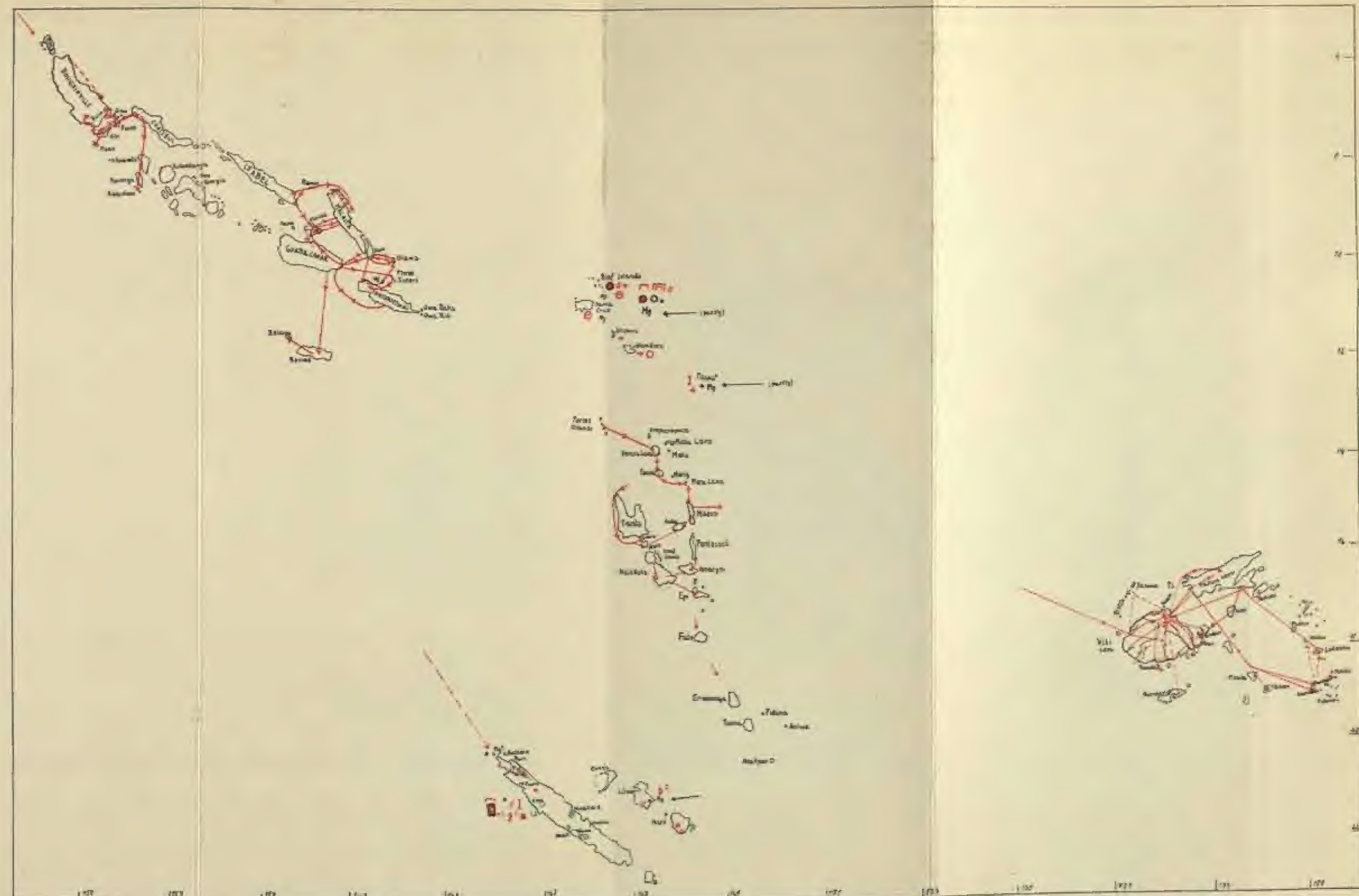
Leaving on one side the dates calculated for the beginning of the migrations of the Polynesians, let us see what direct information is furnished by Melanesian sources and to what extent this information conforms to SPEISER's opinion. In south New Guinea, the final phases of the migrations of the stone-using immigrants coming from the interior of the country were seen to be of very recent date. Thus the Ipi tribes reached the south coast about 1800 or 1850, indicating an analogous age of the light-skinned stone-using immigrants following on their heels; and the Opau migration was in fact seen to have taken place about 100 years ago, to which the Bidedu migration of the Bina which took place about 6 generations ago corresponds, and this seems to be borne out by the introduction of a stone mortar to the Kutubu about 125 years ago. Whether there was any connection between the Mawatta migration from Kiwai to Mawatta which took place about 100 years ago and the migrations of the stone-using immigrants we were unable to show. The migrations of the Majo Marind seemed to have taken place about 350 to 450 years ago, a date which is, however, doubtful, since it is based upon geological considerations and not upon genealogies. In fact none of these dates is of interest for the solution of our present problem, since they apply to the final phases of the migrations of the stone-using immigrants after their crossing of New Guinea, but we have no knowledge whatever as to the date when the stone-using immigrants arrived at the northern coast of New Guinea or at one of the islands off the coast, nor do we know anything regarding the period when the stone-using immigrants penetrated into the interior of New Guinea. Regarding the im-

1) See THOMSON 866 19, CAPELL and LESTER 125 324. 2) 804. 3) We shall not discuss this problem; it is, however, certain that SPEISER had in mind the korwar "style" and not only the korwars which, in Melanesia, are limited to a very restricted area and which by no means overlaps the distribution of the traces of the stone-using immigrants.

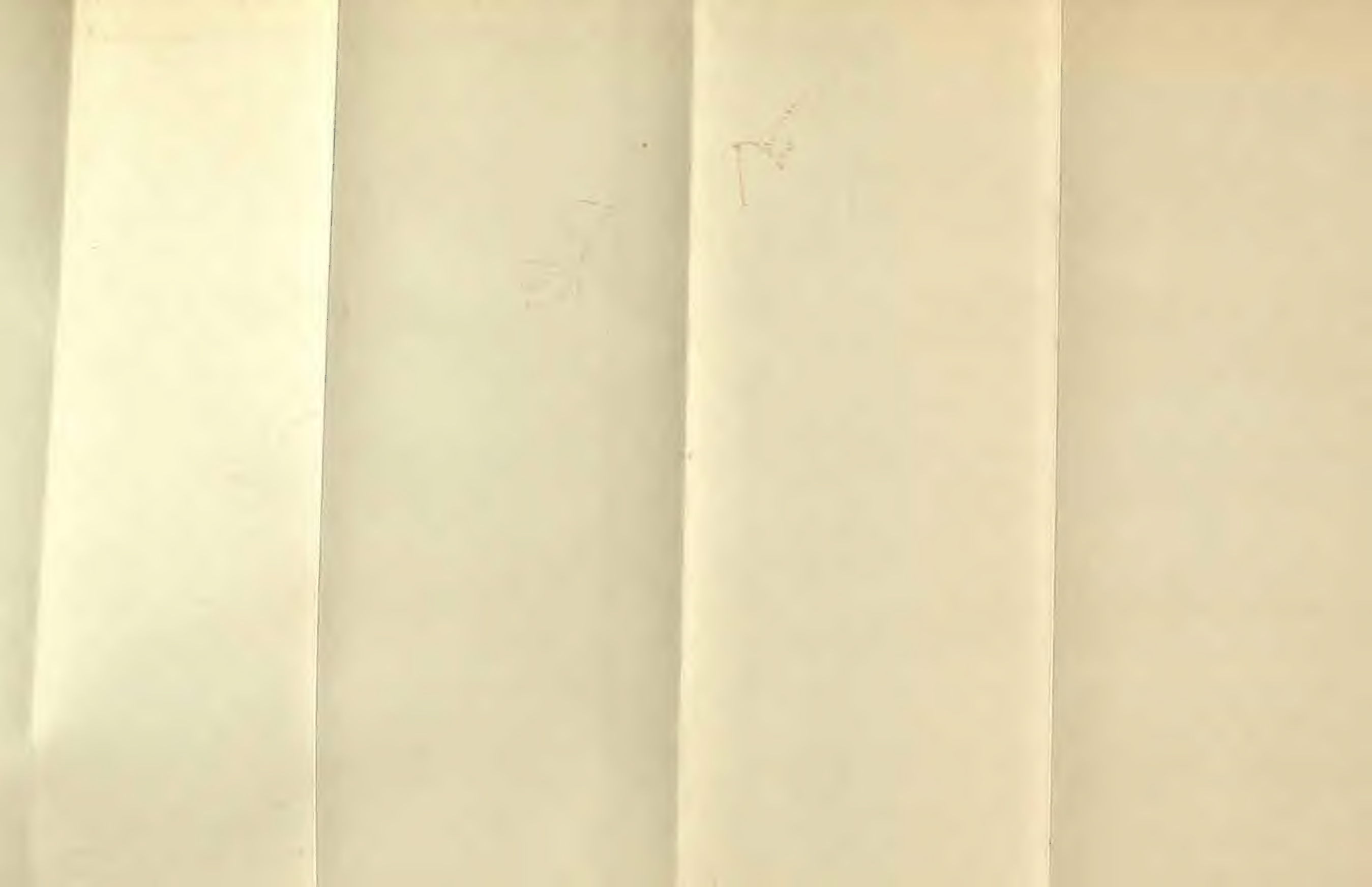
migration of the -stone-using immigrants in the Shortland Islands and Buin, we know only that they are more ancient than the very recent migrations of the Mono-Alu Melanesians who immigrated about 1860 or perhaps about 200 years ago; we are, however, ignorant of the exact date when the immigration of the stone-using immigrants took place. In Suu, at the northern end of Malaita, the chiefly genealogies were seen to go back 26 generations, but among the 'Ai Seni mountain people of the Morodo ridge a list of 66 names was obtained. It will be remembered that the artificial islands off the north coast were more recent than those off the west coast; on the other hand, the stone-using immigrants occupied the mountainous interior much earlier, and it was only later that they descended to the coast. IVENS therefore has no doubt about the reliability of the list with 66 names, although it was rejected by the Lau natives themselves. If, however, the strong migratory tendency of the stone-using immigrants is borne in mind, and if it is furthermore recalled with what rapidity they migrated from Viti Levu to the Lau Islands for instance (although here the pressure of the Melanesians was certainly not without influence on the speed of migration) it is improbable that the interval between the stone-using immigrants of the north coast of Malaita and those of the nearby neighbouring Morodo ridge should be that of 40 generations. It seems therefore more probable that colateral branches were included in the list of 66 names as the Lau people declared. But that the stone-using immigrants of the mountainous interior were actually more ancient than those of the coast is confirmed by the genealogy of the stone-using immigrants of Little Mala whose arrival in the mountains was said to go back 30 generations. The probable accuracy of this genealogy is strengthened by the fact that it fixes the arrival of the stone-using immigrants later than the Morodo genealogy; for some time must necessarily have elapsed in the migration of the stone-using immigrants from north to south Malaita. It would certainly be arbitrary to seek an average date between the genealogy of Little Mala and that of Morodo in order to fix the immigration of the stone-using immigrants into the mountains of North Malaita. If, nevertheless, we were to accept the number of 45 generations for the Morodo ridge, calculating on the basis of 25 years for a generation, 800 would be the date of the year of the immigration of the stone-using immigrants (IVENS' information being published in 1930). If SPEISER is right that the megalithic migrations in the South Seas began in the eight century, our Malaita date would perhaps be somewhat too early, but there can hardly be said to be a contradiction between these two dates. The Areare migration to Marau which took place about 300 years ago must accordingly be a secondary movement of the stone-using immigrants after their descent from the mountainous interior to the coast. In Fiji and the Lau Islands, it has been seen that in 1895 the genealogies of the stone-using immigrants went back

9 or 10 generations, which would mean that their immigration took place about 1600 or 1645 according to whether 25 or 30 years are calculated for a generation. This very recent age of the immigration of the stone-using immigrants would seem to be in striking opposition to the much greater age in Malaita; at first sight this might be taken as contradictory, and might seem to compell us to conclude that one of the dates, or even both, are erroneous. But there is no need to draw such a conclusion. It has been seen that there are good grounds for supposing that the migrations of the stone-using immigrants from Viti Levu were brought about by the pressure of the dark-skinned Melanesians who came to Fiji only little later than the stone-using immigrants themselves. It is but natural to suppose that these Melanesians not only brought about the migrations of the stone-using immigrants from Viti Levu but also their migration to Viti Levu. It has been seen that, according to the Wainamala genealogies, the dark-skinned Melanesians came to this inland tribe six generations ago; counted from the year 1895 when this information was received, this would bring us back to the year 1745, calculated on the basis of 25 years for a generation, or probably some time earlier if the time necessary for covering the distance from the coast to the interior is included. Now, this period agrees almost exactly with that of the migrations of the likewise dark-skinned Mono-Alu Melanesians who, it will be remembered, came to Buin according to one view in 1860, but about 200 years ago according to another. With them we have also identified the black-skinned Melanesians who, according to the Owa Raha dramatic play, came to this island after the stone-using immigrants with whom they came into conflict; and it may be that the immigrants coming from Bugotu, who introduced the Matambala society into Florida, belong to the same group of black-skinned Melanesians whose migrations in that part of the Solomon Islands overlap those of the stone-using immigrants (Read Head)¹). I am therefore of the opinion that it was these later coming dark-skinned Melanesians who in the Solomon Islands already exerted strong pressure upon the stone-using immigrants, thus causing the migration of the stone-using immigrants from the Solomon Islands to Fiji. In these circumstances it is quite possible that the immigration of the stone-using immigrants to the Solomon Islands took place at a much earlier date than that to Fiji. In the eastern Solomon Islands, their further migrations were probably checked for a long time by the wide distances of the open sea

1) It must, however, be stated that if the Mono-Alu Melanesians were actually identical with RIVERS' betel-people, they could not be identified, culturally, with the Melanesian immigrants of Fiji, since betel-chewing is unknown in Fiji, where only the use of kava is known. But even RIVERS has emphasized the fact (725 II 255 ff) that there were no considerable differences between the culture of the betel-people and that of the kava-people. Not being concerned here with the problem of the cultural differences between these two successive streams of immigrants as conceived by RIVERS, we can take it for granted that, racially, all these black-skinned Melanesians were alike.



The geographical distribution of the Megalithic Culture and its migrations in some of the regions of Eastern Melanesia.



which separated them from the archipelagoes lying further to the south-east. It was therefore not until long afterwards that they continued their migration, because of the strong pressure of the later coming dark-skinned Melanesians. By what other routes besides via Fiji and the New Hebrides the stone-using immigrants came to Polynesia, and at what period these migrations took place is not the subject of this study, and we can also disregard the information according to which some elements of the stone-using immigrants came from Polynesia to Sikaiana about 300 years ago, perhaps to Ontong Java nine generations ago, and to Renell Island 17 or 24 generations ago. The migrations of Wallis islanders who came to Ouvéa in the Loyalty Group about 300 years ago can likewise be ignored ¹⁾.

We have now reached the end of our investigation which has disclosed some of the racial characteristics, the culture, the ways of migration and to a certain extent also the period of the migrations of those immigrants who most strongly influenced not only Melanesia but also much wider areas of the South Seas—the Megalithic Immigrants. That this great migration of culture—, only one of the numerous drifts into the Pacific from Asia is of more than merely theoretical interest, was expressed by Woodruff in 1916 in the following words ²⁾: "Immigration from Asia into the Pacific has by no means ceased; in fact it is at present going on quietly at a probably greater rate than during the time of the Polynesian immigration. I predict the period, at no very distant date, when the whole of the Melanesian and Polynesian population of the Pacific Islands will be absorbed and merged in a race composed largely of Chinese and Japanese". This predication has not materialized, but that there was a tendency in this direction is proved by the antagonism which has culminated in the great war in the Pacific.

1) See RAY 705 51. 2) 984 30.

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When the print of this book was already going on and actually almost finished I became acquainted with the following publications mentioning stone mortars, stone pestles, various kinds of carved stones, etc. It is highly satisfying for me to see that these discoveries have been made in precisely those areas in which I have suggested a spread of the megalithic culture.

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